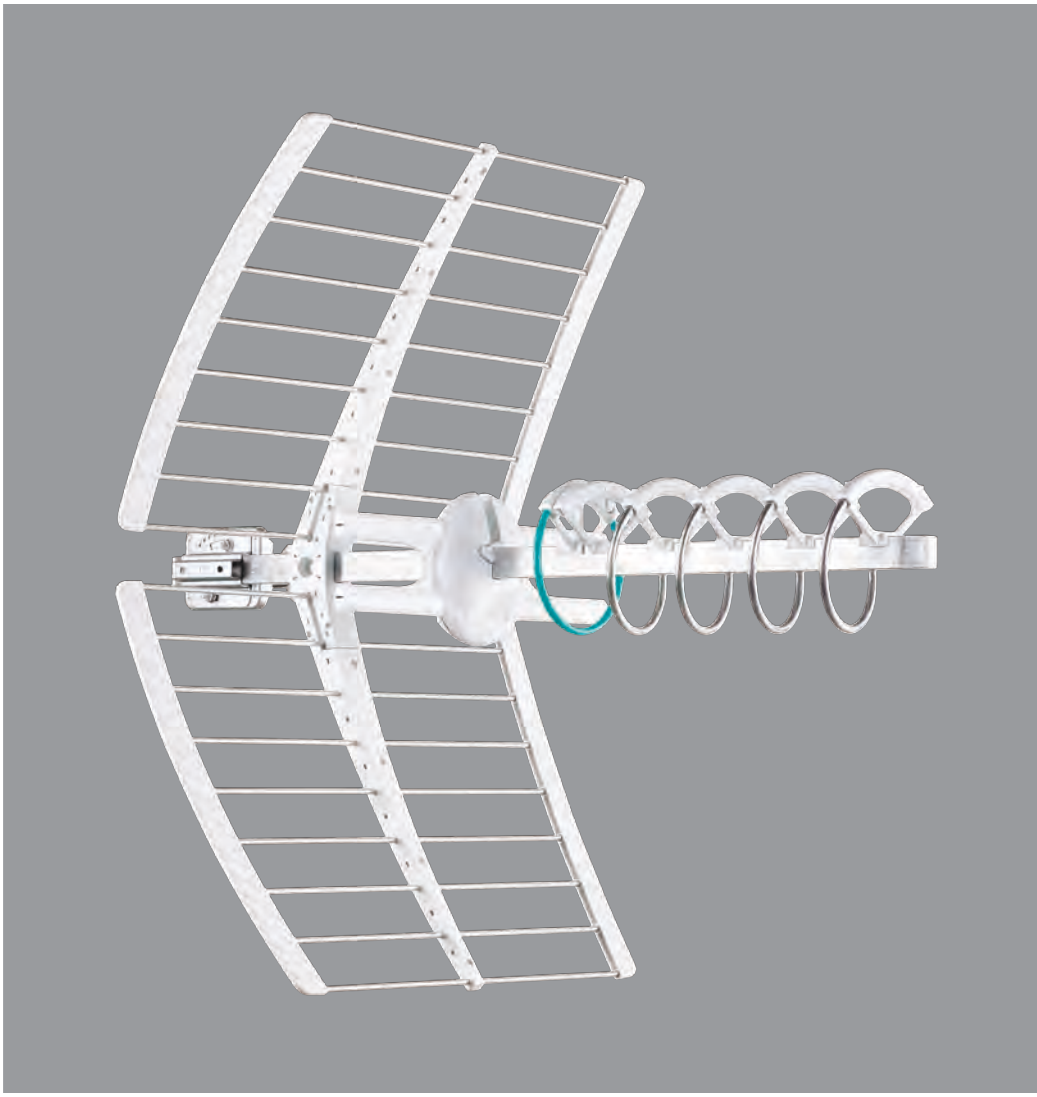
FRACARRO

155

TV and Satellite Solutions
Catalogue 2018

Products for the distribution of audio, video and data signals



- Aerials
- Electronic mast and indoor equipment
- Headends
- Fibre optic solutions and CATV systems
- Multiswitches
- Distribution components

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Company

Fracarro

Established in 1933, Fracarro is today one of the most important companies in Europe in the field of reception and distribution of audio video data signals and active security.
The synergy between the two sectors allows Fracarro to propose integrated solutions for the creation of intelligent buildings and dwellings to connect and interact actively worldwide.
Our aim is to guarantee the supply of high quality products with particular care to all connected services dedicated to the operators within that sector.
Today the company is able to guarantee a comprehensive catalogue of systems in the sector of audio, video and data for the reception and distribution of AVD signals: terrestrial and satellite antennas, amplifiers, mixers, power supplies, headends and distribution components.
With the introduction of DTT and having extensive experience in foreign markets, Fracarro is considered a reference point for solutions relating to the introduction of new technology.

European directives conformity

Fracarro's products are compliant, if applicable, to the following European Directives:

- 2014/53/UE (RED – Apparecchiature Radio)
- 2014/30/UE (EMC – Compatibilità Elettromagnetica)
- 2014/35/UE (LVD – Bassa Tensione)
- 2011/65/UE (RoHS – Restrizione uso Sostanze Pericolose)
- 305/2011 (CPR – Prodotti da costruzione)

As they exceeded tests specified in the technical harmonized standards, carried out by leading accredited laboratories. Such products are identified by the CE marking.
More info about the Quality Policy on www.fracarro.com.

Attention to the environment

To guarantee this we have chosen to join Consorzio ReMedia, a primary Collective System that guarantees consumers the correct treatment and recovery of WEEE and BATTERIES and the promotion of policies aimed at protecting the environment.

Certifications of the Quality Management System

The Fracarro Quality Management System is oriented towards satisfying the requirements of all the interested parties. To guarantee the achievement of this goal, we have chosen to certify the Quality Management System, according to the requirements of ISO9001: 2015, with a primary Certification Body such as CSQ.

Web site and social network

The Fracarro website allows to be constantly updated on the news and the company's initiatives. In particular, the Technical Assistance section provides useful information to support operators in their professional activity,relying on a direct line with the headquarters staff. Fracarro is also present in the major social network to be even closer to the professionists.

Technical assistance

Fracarro provides technical assistance to solve any installation problem in the fastest way. The service is available in each Fracarro company, with specialised staff ready to provide information o define projects.

Case history

Diamante, Diamantini, Aria, Solaria and Solea Towers, Villas, Porta Nuova Milano

Fibre Optic system

The complex, consisting of several buildings, including the Diamante skyscraper, is equipped with a Fracarro TV and Satellite system, realised with a cluster programmable headend (offices) and with a modular K Series headend (residential area).The distribution of the signals in the residential area has been realised with mixed technologies, fiber optic and coaxial, while in office the innovative Home Fibre Fracarro has been used.

The numbers of the system:

- over 100 fibre links
- over 1400 sockets
- more then 35.000 metres of coax cable

Bosco verticale, Isola Milano

Fibre Optic system

Winner of the "International Highrise Award" in 2014 as the most beautiful and innovative skyscraper in the world, Bosco Verticale is equipped with a Fracarro TV and Satellite distribution system.The installation is composed by an agile multicluster headend and by a K series headend for the reshaping of 2 in digital terrestrial satellite transponders. The system has been realised with mixed technology, fiber optic and coaxial.

The numbers of the system:

- over 800 sockets
- SAT signals also for PVR (My Sky)

Hotel Excelsior Venice Lido Resort, Venezia

IP-TV System

The prestigious Venetian hotel chose Fracarro to realise the new IPTV system, through which it has been possible to integrate different technologies and services into a single solution, with a significant simplification of the structure.
For the management of the signals the new generation HeadLine headend was used, composed of modules for the conversion of digital terrestrial and satellite signals in IP. The contents were then managed by the IT service with a distribution over LAN, without using the coaxial cables.

Advantages:

- Reduction of masonry works thanks to the fibre optic distribution. Ready for the connection with the hotel management software (PMS)
- Availability of TV and Satelllite signals as well as Internet on every LAN ports of the hotel hotel (wired, but also reached by wi-fi)
- Distribution of more than 100 Italian and foreign programs (free and pay)
- Remote control of headend, both for ordinary maintenance, for example the change of the channel list without intervention on the TV terminals or tablet, and the management of the anomalies.

TV standards

CCIR - Standard

Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz
Standard B + G Europe											
Band I				S23	318-326	322	319.25	**Band V**			
E 2	47-54	50.5	48.25	S24	326-334	330	327.25	E38	606-614	610	607.25
E 3	54-61	57.5	55.25	S25	334-342	338	335.25	E39	614-622	618	615.25
E 4	61-68	64.5	62.25	S26	342-350	346	343.25	E40	622-630	626	623.25
Band S				S27	350-358	354	351.25	E41	630-638	634	631.25
S 1	104-111	107.5	105.25	S28	358-366	362	359.25	E42	638-646	642	639.25
S 2	111-118	114.5	112.25	S29	366-374	370	367.25	E43	646-654	650	647.25
S 3	118-125	121.5	119.25	S30	374-382	378	375.25	E44	654-662	658	655.25
S 4	125-132	128.5	126.25	S31	382-390	386	383.25	E45	662-670	666	663.25
S 5	132-139	135.5	133.25	S32	390-398	394	391.25	E46	670-678	674	671.25
S 6	139-146	142.5	140.25	S33	398-406	402	399.25	E47	678-686	682	679.25
S 7	146-153	149.5	147.25	S34	406-414	410	407.25	E48	686-694	690	687.25
S 8	153-160	156.5	154.25	S35	414-422	418	415.25	E49	694-702	698	695.25
S 9	160-167	163.5	161.25	S36	422-430	426	423.25	E50	702-710	706	703.25
S10	167-174	170.5	168.25	S37	430-438	434	431.25	E51	710-718	714	711.25
Band III				S38	438-446	442	439.25	E52	718-726	722	719.25
E 5	174-181	177.5	175.25	S39	446-454	450	447.25	E53	726-734	730	727.25
E 6	181-188	184.5	182.25	S40	454-462	458	455.25	E54	734-742	738	735.25
E 7	188-195	191.5	189.25	S41	462-470	466	463.25	E55	742-750	746	743.25
E 8	195-202	198.5	196.25	**Band IV**				E56	750-758	754	751.25
E 9	202-209	205.5	203.25	E21	470-478	474	471.25	E57	758-766	762	759.25
E10	209-216	212.5	210.25	E22	478-486	482	479.25	E58	766-774	770	767.25
E11	216-223	219.5	217.25	E23	486-494	490	487.25	E59	774-782	778	775.25
E12	223-230	226.5	224.25	E24	494-502	498	495.25	E60	782-790	786	783.25
Band S				E25	502-510	506	503.25	**LTE**			
S11	230-237	233.5	231.25	E26	510-518	514	511.25	E61	790-798	794	791.25
S12	237-244	240.5	238.25	E27	518-526	522	519.25	E62	798-806	802	799.25
S13	244-251	247.5	245.25	E28	526-534	530	527.25	E63	806-814	810	807.25
S14	251-258	254.5	252.25	E29	534-542	538	535.25	E64	814-822	818	815.25
S15	258-265	261.5	259.25	E30	542-550	546	543.25	E65	822-830	826	823.25
S16	265-272	268.5	266.25	E31	550-558	554	551.25	E66	830-838	834	831.25
S17	272-279	275.5	273.25	E32	558-566	562	559.25	E67	838-846	842	839.25
S18	279-286	282.5	280.25	E33	566-574	570	567.25	E68	846-854	850	847.25
S19	286-293	289.5	287.25	E34	574-582	578	575.25	E69	854-862	858	855.25
S20	293-300	296.5	294.25	E35	582-590	586	583.25				
S21	302-310	306	303.25	E36	590-598	594	591.25				
S22	310-318	314	311.25	E37	598-606	602	599.25				

CCIR - Standard

Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz
Standard D Russia - OIRT				Standard I South Africa				Standard K French overseas territories			
R 1	48.5-56.5	52.5	49.75	**Band III**				**Band III**			
R 2	58-66	62	59.25	I 4	174-182	178	175.25	K 4	174-182	178	175.25
R 3	76-84	80	77.25	I 5	182-190	186	183.25	K 5	182-190	186	183.25
Band II				I 6	190-198	194	191.25	K 6	190-198	194	191.25
R 4	84-92	88	85.25	I 7	198-206	202	199.25	K 7	198-206	202	199.25
R 5	92-100	96	93.25	I 8	206-214	210	207.25	K 8	206-214	210	207.25
Band III				I 9	214-222	218	215.25	K 9	214-222	218	215.25
R 6	174-182	182	175.25	I 10	222-230	226	223.25				
R 7	182-190	190	183.25	I 11	230-238	234	231.25				
R 8	190-198	198	191.25	I (12)	238-246	242	239.25				
R 9	198-206	206	199.25	I 13	246-254	250	247.25				
R 10	206-214	214	207.25								
R 11	214-222	222	215.25								
R 12	222-230	230	223.25								

Level conversion table (75Ω)

mV	dBµV	dBm	mV	dBµV	dBm
0.10	40	-68.8	12.59	82	-26.8
0.12	42	-66.8	15.85	84	-24.8
0.16	44	-64.8	19.95	86	-22.8
0.20	46	-62.8	25.12	88	-20
0.25	48	-60.8	31.62	90	-18.8
0.31	50	-58.8	39.81	92	-16.8
0.39	52	-56.8	50.12	94	-14.8
0.50	54	-54.8	63.10	96	-12.8
0.63	56	-52.8	79.43	98	-10.8
0.79	58	-50.8	100.00	100	-8.8
1.00	60	-48.8	125.89	102	-6.8
1.26	62	-46.8	158.49	104	-4.8
1.58	64	-44.8	199.53	106	-2.8
2.00	66	-42.8	251.19	108	-0.8
2.51	68	-40.8	316.23	110	1.2
3.16	70	-38.8	398.11	112	3.2
3.98	72	-36.8	501.19	114	5.2
5.01	74	-34.8	630.96	116	7.2
6.31	76	-32.8	794.33	118	9.2
7.94	78	-30.8	1000.00	120	11.2
10.00	80	-28.8			

Comparison noise figure and signal-noise ratio

Noise figure	Kto	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
	dB	4.8	5.4	6.0	6.5	7.0	7.4	7.8	8.1	8.4	8.7	9.0
Noise voltage at 75 Ohm	dBµV	7.1	7.7	8.3	8.8	9.3	9.7	10.1	10.4	10.7	11.0	11.3

Countries which have completed Analogue Switch Off (ASO)

Country	Standard	Compression	Country	Standard	Compression
Austria	DVB-T/DVB-T2	MPEG-2	Latvia	DVB-T/ DVB-T2	MPEG-4 AVC
Belgium	DVB-T	MPEG-2	Luxemburg	DVB-T	MPEG-2
Croatia	DVB-T	MPEG-2	Norway	DVB-T	MPEG-4 AVC
Czech rep.	DVB-T/DVB-T2	MPEG-2	Netherlands	DVB-T	MPEG-2
Denmark	DVB-T	MPEG-2/MPEG-4 AVC	Portugal	DVB-T	MPEG-4 AVC
Estonia	DVB-T/DVB-T2	MPEG-4 AVC	Slovak rep.	DVB-T/DVB-T2	MPEG-2
Finland	DVB-T/DVB-T2	MPEG-2	Slovenia	DVB-T	MPEG-4 AVC
France	DVB-T	MPEG-2/MPEG-4 AVC	Spain	DVB-T/DVB-T2	MPEG-2
Germany	DVB-T	MPEG-2	Sweden	DVB-T/DVB-T2	MPEG-2
Ireland	DVB-T	MPEG-2	Switzerland	DVB-T	MPEG-2
Italy	DVB-T/ DVB-T2	MPEG-4 AVC	UK	DVB-T/DVB-T2	MPEG-2
Lithuania	DVB-T/ DVB-T2	MPEG-4 AVC			

Sources: www.digitag.org - www.dvb.org

Main transmission standards

DTT	DVB-T	DVB-T2
Modulation	COFDM	COFDM
Number of sub carriers	2K, 8K	1K, 2K, 4K, 8K, 16K, 32K
Sub carriers modulation	QPSK , 16QAM, 64QAM	QPSK, 16QAM, 64QAM, 256QAM
FEC	1/2 , 2/3 , 3/4 , 5/6 , 7/8	1/2, 3/5, 2/3, 3/4, 4/5 , 5/6
Guard interval	1/4, 1/8, 1/16, 1/32	1/4, 19/256, 1/8, 19/128, 1/16, 1/32
Bandwidth	6, 7 or 8MHz	1.7, 5, 6, 7, 8, 10MHz
Maximum useful bit-rate	About 31.6Mbps	About 50Mbps
SAT	**DVB-S**	**DVB-S2**
Modulation	QPSK	QPSK, 8PSK, 16APSK, 32APSK
FEC	1/2 , 2/3 , 3/4 , 5/6 , 7/8	1/4 , 1/3 , 1/2 , 3/5 , 2/3, 3/4, 4/5, 5/6, 8/9, 9/10

Available bit rates for a DVB-T system in 8MHz channels

Modulation	Codification value	Guard interval				Modulation	Codification value	Guard interval			
		1/4	1/8	1/16	1/32			1/4	1/8	1/16	1/32
QPSK	1/2	4.98	5.53	5.85	6.03	64QAM	1/2	14.93	16.59	17.56	18.10
	2/3	6.64	7.37	7.81	8.04		2/3	19.91	22.12	23.42	24.13
	3/4	7.46	8.29	8.78	9.05		3/4	22.39	24.88	26.35	27.14
	5/6	8.29	9.22	9.76	10.05		5/6	24.88	27.65	29.27	30.16
	7/8	8.71	9.68	10.25	10.56		7/8	26.13	29.03	30.74	31.67
16QAM	1/2	9.95	11.06	11.71	12.06						
	2/3	13.27	14.75	15.61	16.09						
	3/4	14.93	16.59	17.56	18.10						
	5/6	16.59	18.43	19.52	20.11						
	7/8	17.42	19.35	20.49	21.11						

Aerials

FM and DAB

FM and DAB Series

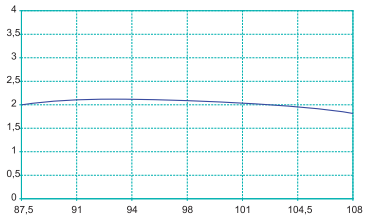
FM and DAB band aerials complete with F connector. Different design for the radio signals reception

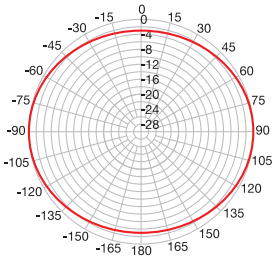
ANT1200A FM OMNI

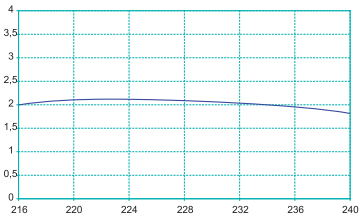
DAB

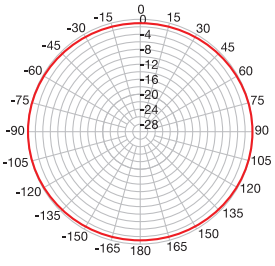
		ANT1200A	FM OMNI	DAB
Code		213001	213009	213010
Elements	No.	1	1	1
Bands		FM	FM	DAB
Channels		-	-	DAB
Freq. band	MHz	87.5-108	87.5-108	216-240
Gain	dBi	2.1	2.1	2.1
Front-to-back ratio	dB	Omni	Omni	Omni
Return loss	dB	-16	-6	-16
Beamwidth (-3dB)	°	360	360	360
Wind load at 120Km/h (720N/m2)	Kg (N)	3 (29.43)	2.7 (26.46)	2 (19.62)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	96 x 77	63 x 10.5	59 x 8
Multiple packaging quantity	Pcs	10	10	8
Unit weight	Kg	0.90	0.84	0.54
Total weight with packaging	Kg	10.6	8.6	4.4
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		N/A	N/A	N/A
Vertical polarisation		-	-	-
Vertical polarisation with tilt adjustment		-	-	-
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@105MHz for ANT1200A and FMOMNI, @230MHz for DAB)









ANT1200A **FM OMNI** **DAB**

VHF

BAND III Serie

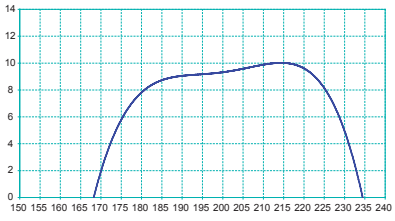
Band III aerials complete with F connector.
E512 with 4 and 6 elements.
TERZA 6HD high quality, premounted aerial.

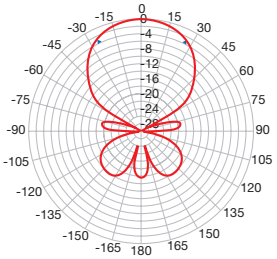
6E512_F

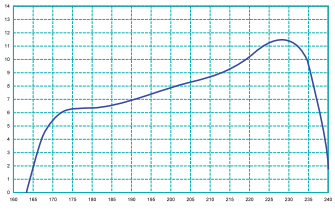
TERZA 6HD

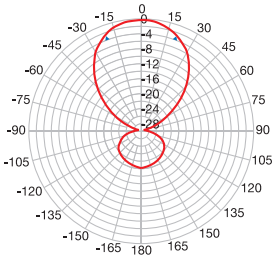
		4E512_F	6E512_F	TERZA 6HD
Code		218706	218718	213008
Elements	No.	4	6	6
Bands		3	3	3
Channels		E5-E12	E5-E12	E5-E12
Freq. band	MHz	174-230	174-230	174-230
Gain	dBi	7	10	11
Front-to-back ratio	dB	16	18	25
Return loss	dB	-10	-12	-15
Beamwidth (-3dB)	°	±35	±28	±26
Wind load at 120Km/h (720N/m2)	Kg (N)	2.0 (19.62)	3.0 (29.13)	3.8 (37.24)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	108 x 83	181 x 82	119 x 86
Multiple packaging quantity	Pcs	20	20	10
Unit weight	Kg	0.73	0.96	1.20
Total weight with packaging	Kg	15.6	20.2	1.2
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)	MEC3603G - MEC3603Z
Vertical polarisation		PV10 (210011)	PV10 (210011)	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	MEC3603G - MEC3603Z
Auxiliary boom		N/A	N/A	CA2 (219602)

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)









6E512_F

TERZA 6HD

VHF

BLV Serie

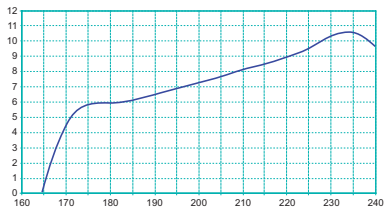
Band III aerials complete with F connector.
High **gain**, optimum impedance adaptation and excellent directivity.
Exclusive Fracarro design

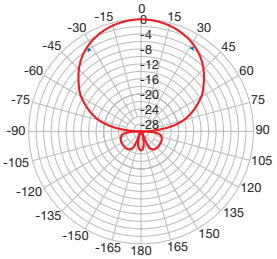
BLV4F

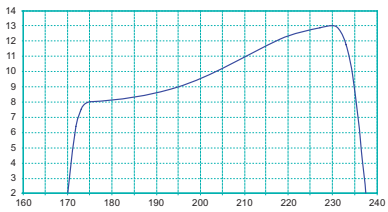
BLV6F

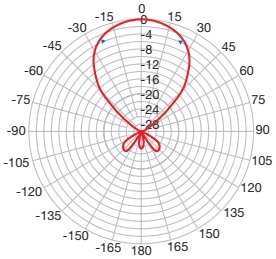
		BLV4F	BLV6F
Code		218038	218058
Elements	No.	4	6
Bands		3	3
Channels		E5-E12	E5-E12
Freq. band	MHz	174-230	174-230
Gain	dBi	10.5	13
Front-to-back ratio	dB	20	24
Return loss	dB	-23	-22
Beamwidth (-3dB)	°	±31	±24
Wind load at 120Km/h (720N/m2)	Kg (N)	3.0 (29.43)	4.5 (44.14)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	64 x 87	149 x 87
Multiple packaging quantity	Pcs	10	3
Unit weight	Kg	1.23	2.00
Total weight with packaging	Kg	14.5	6.0
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		PV10 (210011)	PV10 (210011)
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)









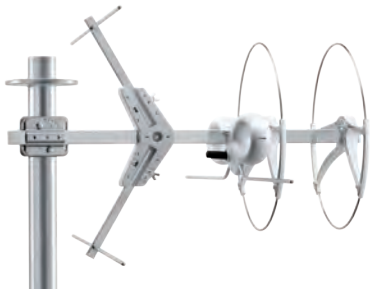
BLV4F

BLV6F

VHF

SIGMA V2 HD Series

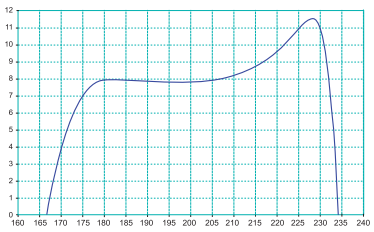
Band III aerials complete with F connector.
Tool less mounting thanks to its **quick coupling** radiator, reflector and director elements.
Exclusive design patented by Fracarro.

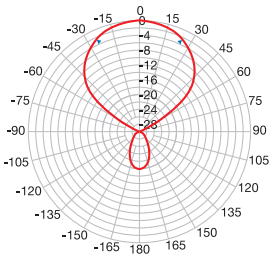


SIGMA V2 HD

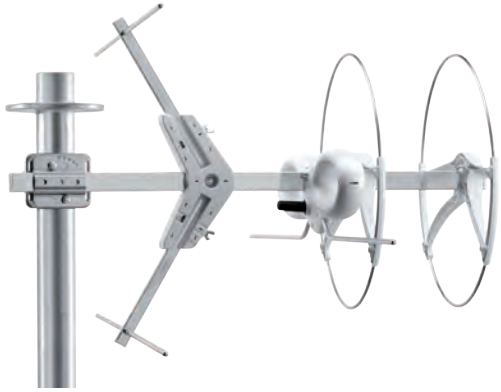
		SIGMA V2 HD
Code		213203
Elements	No.	2
Bands		3
Channels		E5-E12
Freq. band	MHz	174-230
Gain	dBi	11.5
Front-to-back ratio	dB	25
Return loss	dB	-12
Beamwidth (-3dB)	°	±25
Wind load at 120Km/h (720N/m2)	Kg (N)	10 (98)
Connector	Type	F
Impedance	Ohm	75
Max mast diameter Ø	mm	60
Dimensions	cm	76 x 100
Multiple packaging quantity	Pcs	1
Unit weight	Kg	2.76
Total weight with packaging	Kg	2.76
Accessories		
Horizontal polarisation		Included
Horizontal polarisation with tilt adjustment		Included
Vertical polarisation		Included
Vertical polarisation with tilt adjustment		Included
Auxiliary boom		N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





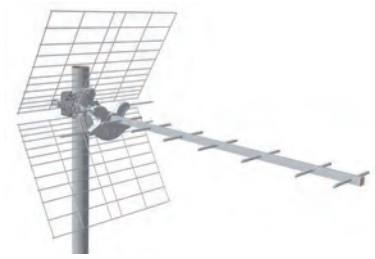
SIGMA V2 HD



UHF LTE

TAU LTE Series

UHF band Yagi aerial complete with F connector
Redesigned geometrical director dipoles distribution in order to obtain a better LTE signal filtering.
Particular mechanical strength thanks to 8mm extruded aluminium tubes
These aerials benefit also from a **built in LTE filter** within the dipole.

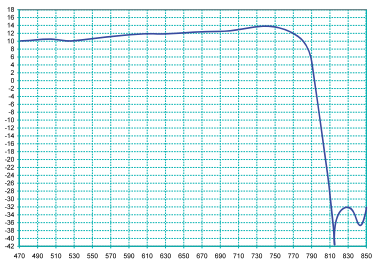


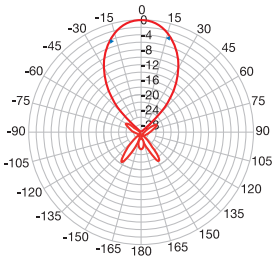
TAU LTE KILLER

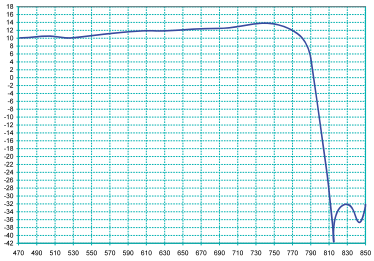
TAU LTE KILLER+

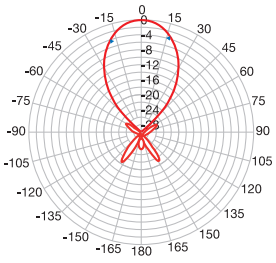
		TAU LTE KILLER	TAU LTE KILLER+
Code		213103	213104
Elements	No.	7	7
Bands		UHF	UHF
Channels		E21-E60	E21-E60
Freq. band	MHz	470-790	470-790
Gain	dBi	14	14
Front-to-back ratio	dB	38	38
Return loss	dB	-18	-18
Beamwidth (-3dB)	°	±21	±21
Wind load at 120Km/h (720N/m2)	Kg (N)	5.3 (51.94)	5.3 (51.94)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	1170 x 497	1170 x 497
Multiple packaging quantity	Pcs	1	1
Unit weight	Kg	1.75	1.75
Total weight with packaging	Kg	1.9	1.9
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		Included	Included
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)









TAU LTE KILLER

TAU LTE KILLER+

UHF LTE

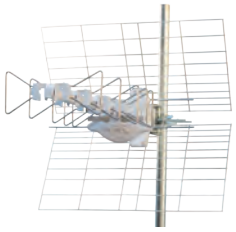
BLU LTE Series

UHF band biconical aerial complete with F connector and grid reflectors.

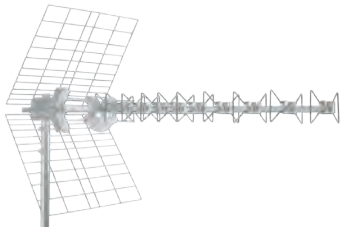
Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **wingnut.**

High **gain**, optimum impedance adaptation and excellent directivity.

This aerial benefits from a **built in LTE filter** within the dipole.



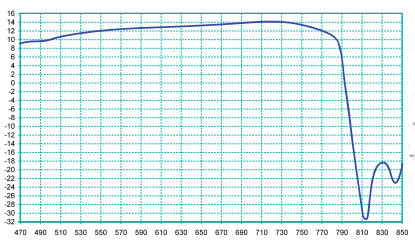
BLU5HDLTE

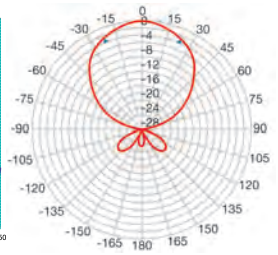


BLU10HDLTE

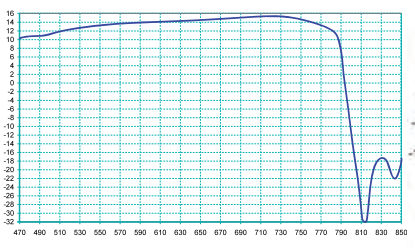
		BLU5HDLTE	BLU10HDLTE	BLU22HDLTE
Code		217910	217909	217912
Elements	No.	5	10	22
Bands		UHF	UHF	UHF
Channels		E21-E60	E21-E60	E21-E60
Freq. band	MHz	470-790	470-790	470-790
Gain	dBi	14	16	18,5
Front-to-back ratio	dB	30	30	30
Return loss	dB	-16	-16	-18
Beamwidth (-3dB)	°	±25	±22	±17
Wind load at 120Km/h (720N/m2)	Kg (N)	5.7 (55.86)	7.2 (70.56)	12.2 (119.65)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	84 x 50	119 x 50	242 x 50
Multiple packaging quantity	Pcs	10	10	1
Unit weight	Kg	1.75	2.22	3.54
Total weight with packaging	Kg	19.4	24.6	35
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

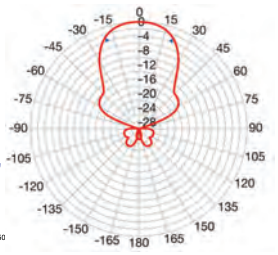
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)





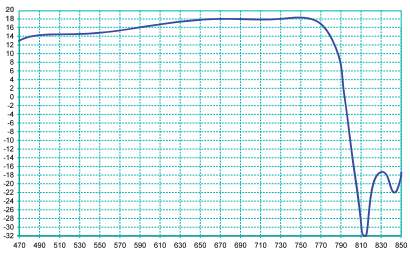
BLU5HDLTE

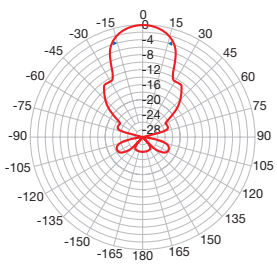




BLU10HDLTE

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



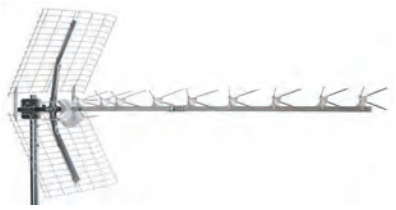


BLU22HDLTE

UHF LTE

LAMBDA LTE Series

UHF band Yagi aerial complete with F connector
Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut.**
This aerial benefits from a **built in LTE filter** within the dipole.
High gain, optimum mechanical strength and excellent front-to-back ratio.

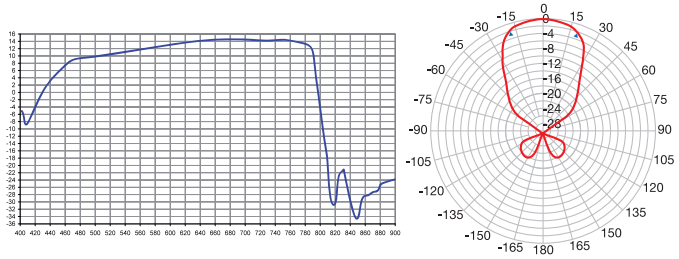


LAMBDA 9 LTE

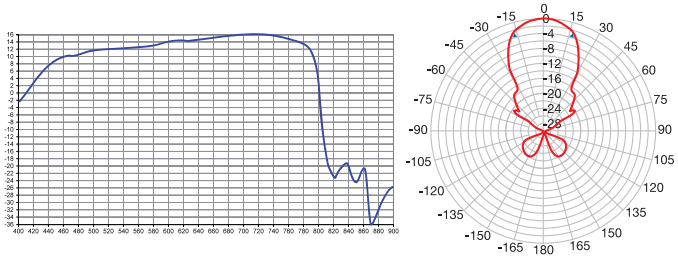
LAMBDA 14 LTE

		LAMBDA 9 LTE	LAMBDA 14 LTE
Code		213057	213058
Elements	No.	9	14
Bands		UHF	UHF
Channels		E21-E60	E21-E60
Freq. band	MHz	470-790	470-790
Gain	dBi	14.5	16
Front-to-back ratio	dB	24	26
Return loss	dB	-16	-16
Beamwidth (-3dB)	°	±20	±17
Wind load at 120Km/h (720N/m2)	Kg (N)	15 (147.15)	17.5 (171.67)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	152 x 50	177 x 50
Multiple packaging quantity	Pcs	1	1
Unit weight	Kg	2.72	3.38
Total weight with packaging	Kg	2.7	3.4
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		Included	Included
Auxiliary boom		N/A	N/A

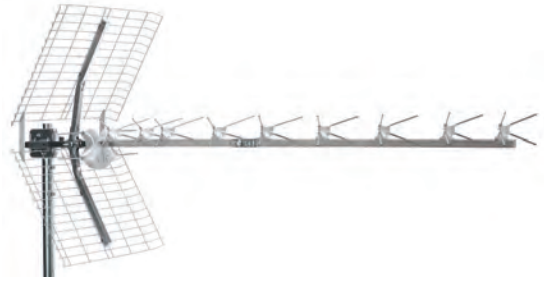
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



LAMBDA 9 LTE



LAMBDA 14 LTE



UHF LTE

SIGMALTE Series

UHF band Loop Yagi aerial complete with F connector

Tool less mounting ELIKA series, thanks to premounted elements, quick coupling radiator and reflectors, mast bracket with zenith adjustment and **large wingnut**.

This aerial benefits from a **built in LTE filter** within the dipole.

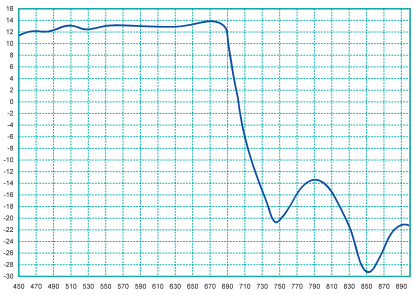
High gain, excellent directivity and almost total absence of side lobes.

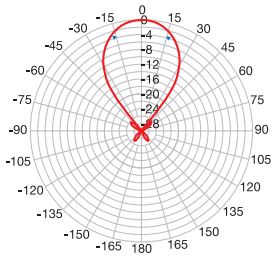
Exclusive design patented by Fracarro.

SIGMA 6HD LTE

		SIGMA6HD LTE700	SIGMA 6HD LTE	SIGMA 8HD LTE
Code		213224	213219	213213
Elements	No.	6	6	8
Bands		UHF	UHF	UHF
Channels		E21-E48	E21-E60	E21-E60
Freq. band	MHz	470-694	470-790	470-790
Gain	dBi	14	15	16
Front-to-back ratio	dB	32	32	32
Return loss	dB	-18	-18	-18
Beamwidth (-3dB)	°	±18	±18	±17
Wind load at 120Km/h (720N/m2)	Kg (N)	23 (225.4)	23 (225.4)	23 (225.4)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	92 x 62	92 x 62	119 x 62
Multiple packaging quantity	Pcs	4	4	4
Unit weight	Kg	2.30	2.30	2.77
Total weight with packaging	Kg	12.0	12.0	16.8
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

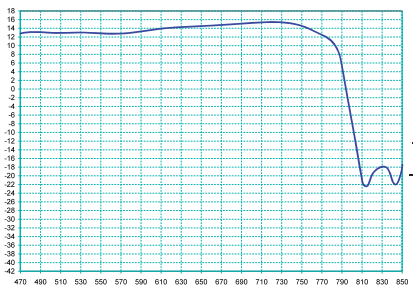
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

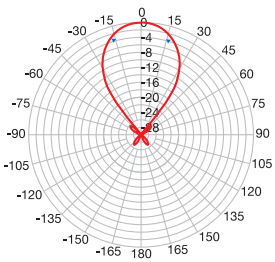


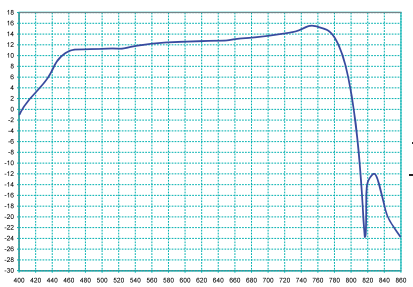


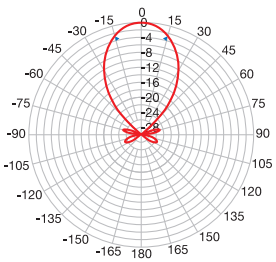
SIGMA6HD LTE700

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)









SIGMA 6HD LTE

SIGMA 8HD LTE

UHF LTE

ELIKA Series

Helical UHF band aerial with F connector, it is an evolution of the Loop Yagi technology, already adopted to Fracarro

Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut.**

This aerial benefits from a **built in LTE filter** within the dipole.

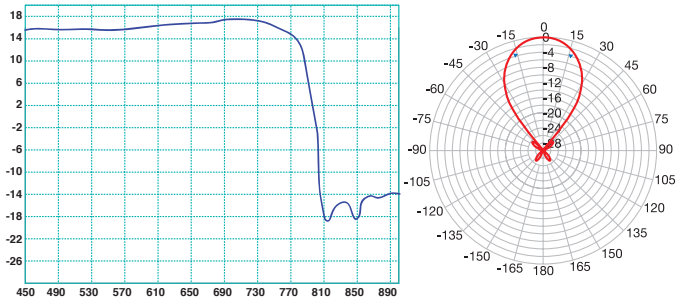
High gain, excellent directivity and almost total absence of side lobes.

Exclusive Elika design **patented** by Fracarro.

ELIKA

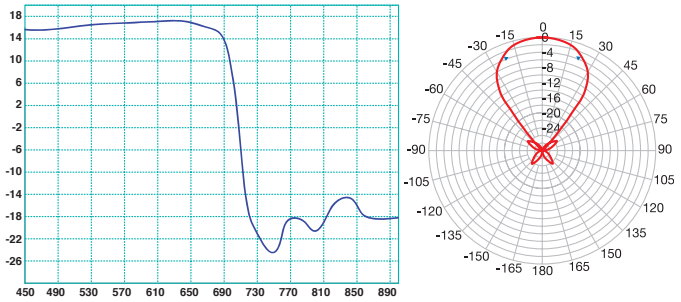
		ELIKA	ELIKA 700 P	ELIKA 700 C
Code		213226	213228	213229
Elements	No.	1	1	1
Bands		UHF	UHF	UHF
Channels		E21-E60	E21-E48	E21-E48
Freq. band	MHz	470-790	470-694	470-694
Gain	dBi	17,5	17	17
Front-to-back ratio	dB	32	32	32
Return loss	dB	-18	-18	-18
Beamwidth (-3dB)	°	±18	±22	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	19 (186.2)	19 (186.2)	19 (186.2)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	92 x 82 x 62	92 x 82 x 62	92 x 82 x 62
Multiple packaging quantity	Pcs	8	8	6
Unit weight	Kg	2.30	2.30	2.30
Total weight with packaging	Kg	23	23	18
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A
Single packaging		Plastic bag	Plastic bag	cardboard packaging

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



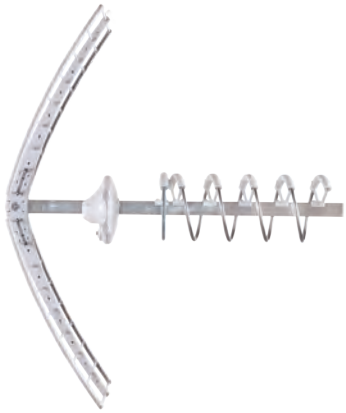
ELIKA

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)



ELIKA 700 P e ELIKA 700 C

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)



UHF LTE

ELIKA PRO Series

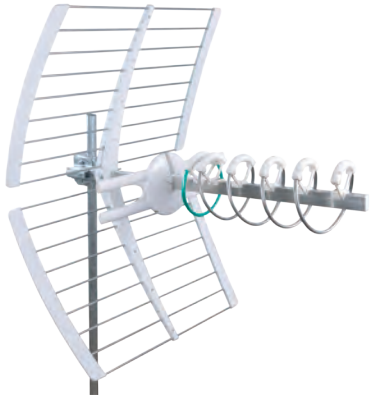
Active helical UHF band aerial complete with F connector and **an LED alignment system and an automatic gain control (AGC)**. It is an evolution of the Loop Yagi technology, already adopted to Fracarro

Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut.**

This aerial benefits from a **built in LTE filter** within the dipole.

High gain, excellent directivity and almost total absence of side lobes.

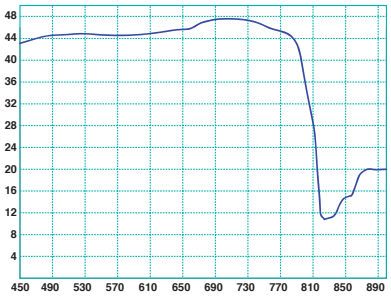
Exclusive Elika design **patented** by Fracarro.

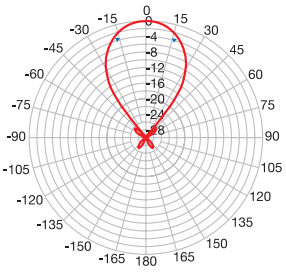


ELIKA PRO

		ELIKA PRO	ELIKA PRO 700 P	ELIKA PRO 700 C
Code		213227	213230	213231
Elements	No.	1	1	1
Bands		UHF	UHF	UHF
Channels		E21-E60	E21-E48	E21-E48
Freq. band	MHz	470-790	470-694	470-694
Gain	dBi	47,5	47	47
CAG dynamics	dBµV	65-80	65-80	65-80
Fixed output level	dBµV	98	98	98
Supply voltage	V	12-24	12-24	12-24
Current cons.	mA	45	45	45
Front-to-back ratio	dB	32	32	32
Return loss	dB	-15	-15	-15
Beamwidth (-3dB)	°	±18	±22	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	19 (186.2)	19 (186.2)	19 (186.2)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions (L x H x W)	cm	92 x 82 x 62	92 x 82 x 62	92 x 82 x 62
Multiple packaging quantity	Pcs	8	8	6
Unit weight	Kg	2.30	2.30	2.30
Total weight with packaging	Kg	23	23	18
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

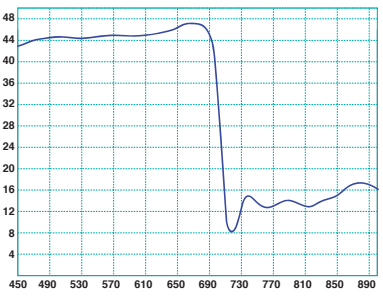
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)

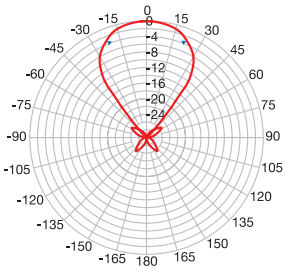




ELIKA PRO

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

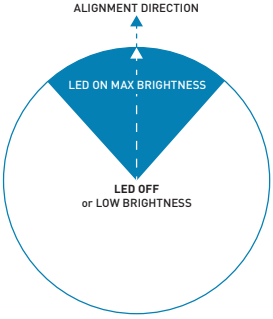




ELIKA PRO 700 P e ELIKA PRO 700 C

LED alignment system

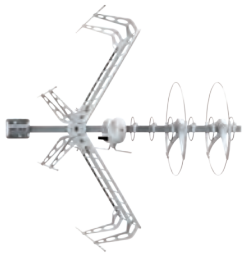
Elika PRO is the only aerial with LED assisted alignment



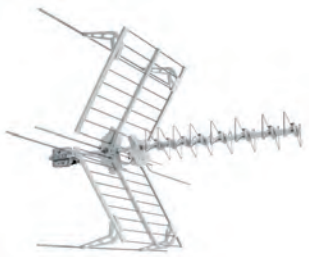
COMBO LTE

COMBO LTE Series

UHF and III bands Biconical and **Loop Yagi** aerial complete with F connector.
#b#Tool less mast mounting #b# thanks to premounted elements, quick coupling radiator and reflectors, mast bracket with zenith adjustment and **wingnut**.
This aerial benefits from a **built in LTE filter** within the dipole.
Exclusive design patented by Fracarro.



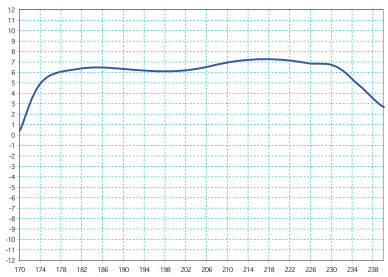
SIGMA COMBO LTE

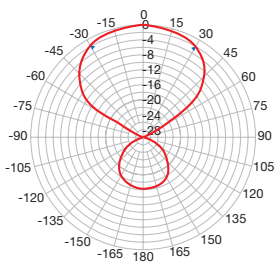


BLU COMBO LTE

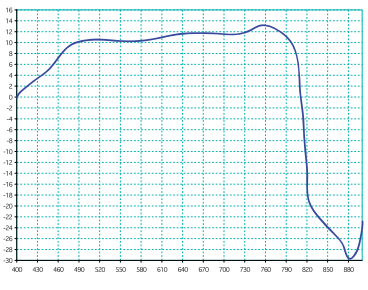
		BLU COMBO LTE	SIGMA COMBO LTE
Code		217911	213223
Elements	No.	4 / 8	6 / 6
Bands		3 / UHF	3 / UHF
Channels		E5-E12 / E21-E60	E5-E12 / E21-E60
Freq. band	MHz	174-230 / 470-790	174-230 / 470-790
Gain	dBi	7 / 13	9 / 14
Front-to-back ratio	dB	20 / 32	20 / 32
Return loss	dB	-14 / -18	-14 / -18
Beamwidth (-3dB)	°	±25 / ±20	±25 / ±20
Wind load at 120Km/h (720N/m2)	Kg (N)	9 (88.2)	26 (256)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	118 x 100	108 x 100
Multiple packaging quantity	Pcs	8	6
Unit weight	Kg	2.76	3.83
Total weight with packaging	Kg	26.0	27.0
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		Included	Included
Auxiliary boom		N/A	N/A

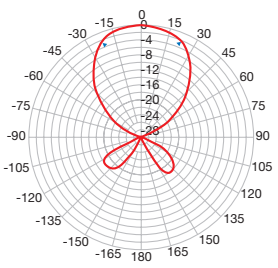
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)



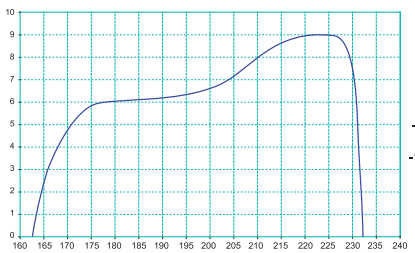


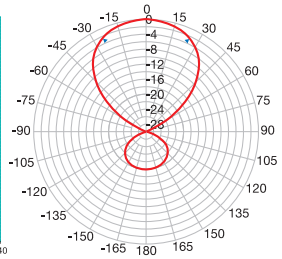
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)

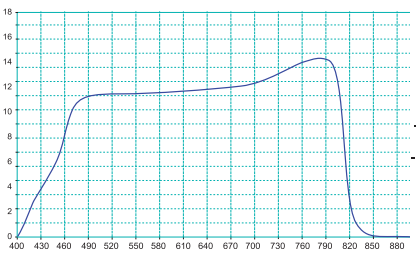


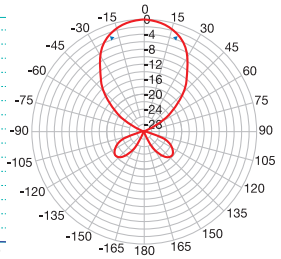


BLU COMBO LTE









SIGMA COMBO LTE

LOG PERIODIC

LP III IV Series

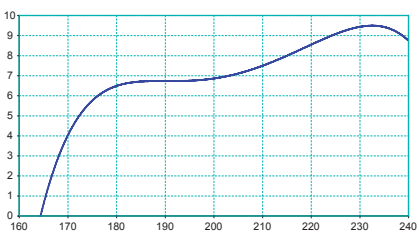
Log-periodic pre-assembled aerials for **III and IV bands** characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.
Due to the specific mast clamp these aerials can be assembled in **vertical or horizontal polarisation without additional accessories**

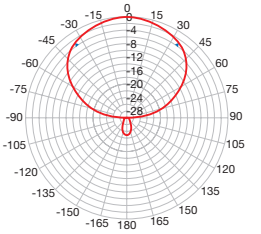
LP34F

LP3F

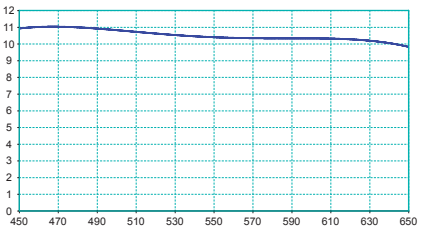
		LP34F	LP3F	LP4F
Code		216135	216171	216151
Elements	No.	14	6	8
Bands		3+4	3	4
Channels		E5-E12 / E21-E37	E5-E12	E21-E37
Freq. band	MHz	174-230 / 470-606	174-230	470-606
Gain	dBi	9.5 / 11	9	10
Front-to-back ratio	dB	21 / 25	32	32
Return loss	dB	-18 / -15	-18	-18
Beamwidth (-3dB)	°	±35 / ±28	±32	±28
Wind load at 120Km/h (720N/m2)	Kg (N)	2.8 (27.46)	2.8 (27.46)	2.8 (27.46)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	115 x 86	65 x 33	99 x 32
Multiple packaging quantity	Pcs	20	60	20
Unit weight	Kg	1.13	0.56	0.79
Total weight with packaging	Kg	23.0	38.0	16.3
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A	N/A

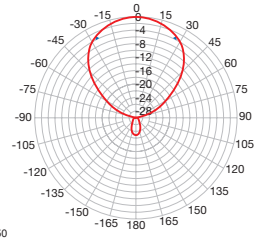
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





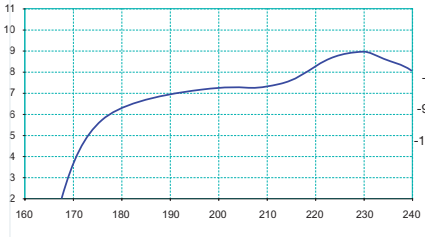
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

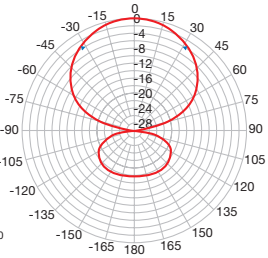




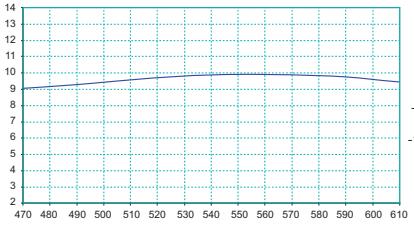
LP34F

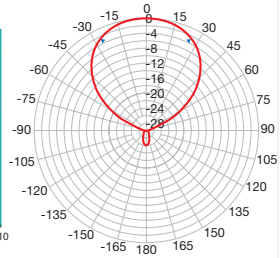
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)



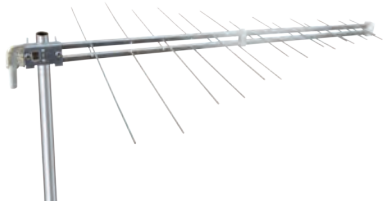


LP3F **LP4F**

LOG PERIODIC

LP LTE Series

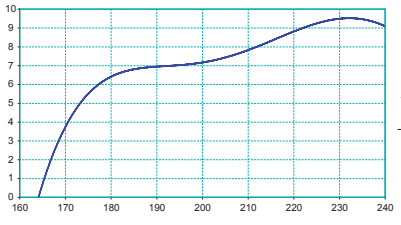
Log-periodic pre-assembled aerials characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.
Due to the specific mast clamp these aerials can be assembled in **vertical or horizontal polarisation without additional accessories**
Geometrical dipole distribution has been **redesigned** in order to obtain a good LTE filtering.

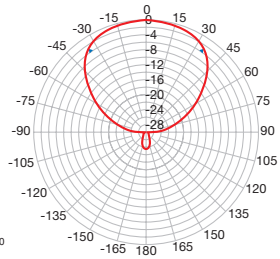


LP345F LTE

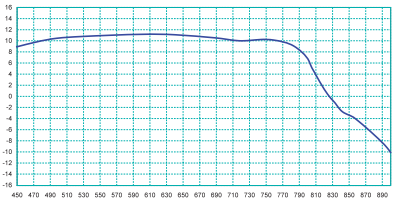
		LP345F LTE	LP345MF LTE
Code		216270	216269
Elements	No.	16+16	15+15
Bands		3 / UHF	3 / UHF
Channels		E5-E12 / E21-E60	E5-E12 / E21-E60
Freq. band	MHz	174-230 / 470-790	174-230 / 470-790
Gain	dBi	9 / 11	8.5 / 9.5
Front-to-back ratio	dB	24 / 32	22 / 30
Return loss	dB	-16 / -16	-14 / -13
Beamwidth (-3dB)	°	±34 / ±31	±34 / ±30
Wind load at 120Km/h (720N/m2)	Kg (N)	3.9 (38.25)	2.7 (26.48)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	115 x 86	77 x 86
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	1.12	0.90
Total weight with packaging	Kg	22.9	18.5
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

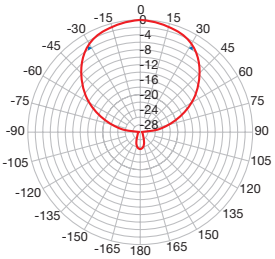
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





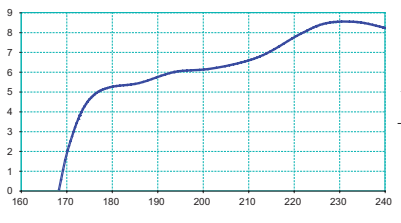
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)

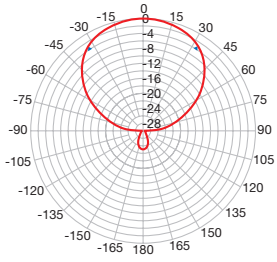




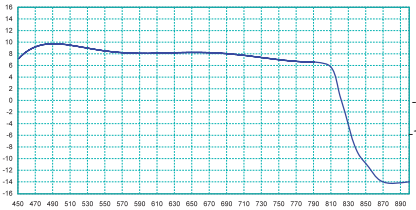
LP345F LTE

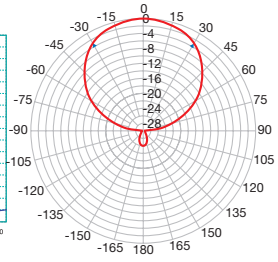
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



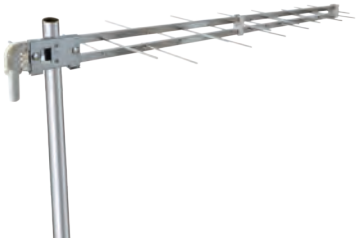


LP345MF LTE

LOG PERIODIC

LP LTE Series

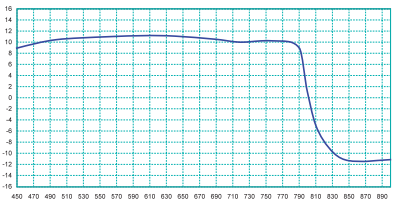
Log-periodic pre-assembled aerials characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.
Due to the specific mast clamp these aerials can be assembled in **vertical or horizontal polarisation without additional accessories**
Geometrical dipole distribution has been **redesigned** in order to obtain a good LTE filtering.

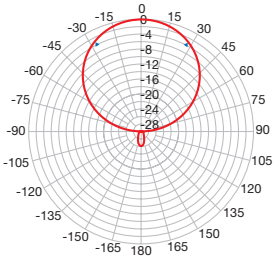


LP45F LTE

		LP45F LTE	LP45NF LTE	LP5F LTE
Code		216249	216250	216208
Elements	No.	14+14	15+15	14+14
Bands		UHF	UHF	5
Channels		E21-E60	E21-E60	E38-E60
Freq. band	MHz	470-790	470-790	606-790
Gain	dBi	11	11.5	12
Front-to-back ratio	dB	36	36	36
Return loss	dB	-15	-15	-15
Beamwidth (-3dB)	°	±28	±25	±25
Wind load at 120Km/h (720N/m2)	Kg (N)	3.0 (29.43)	3.0 (29.43)	3.0 (29.43)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	99 x 32	116 x 86	99 x 24
Multiple packaging quantity	Pcs	15	20	20
Unit weight	Kg	0.80	0.88	0.77
Total weight with packaging	Kg	13.2	18.0	15.8
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A	N/A

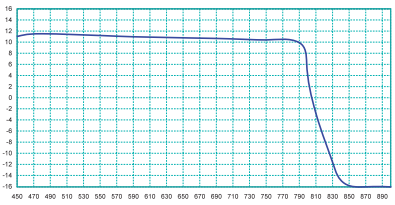
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)

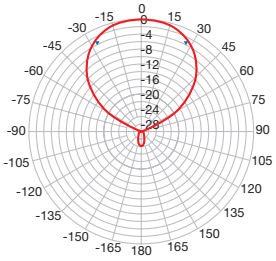




LP45F LTE

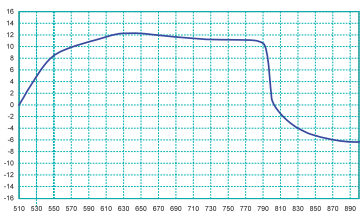
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)

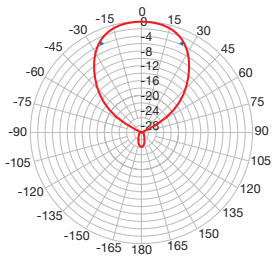




LP45NF LTE

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)





LP5F LTE

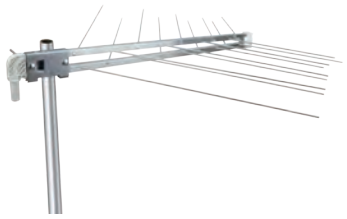
LOG PERIODIC

LP LTE Series

Log-periodic pre-assembled aerials characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.

Due to the specific mast clamp these aerials can be assembled in **vertical or horizontal polarisation without additional accessories**

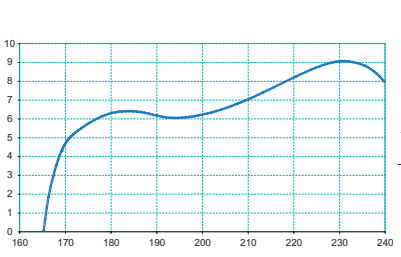
Geometrical dipole distribution has been **redesigned** in order to obtain a good LTE filtering.

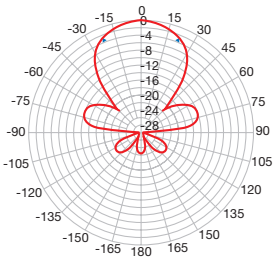


LPV345F LTE

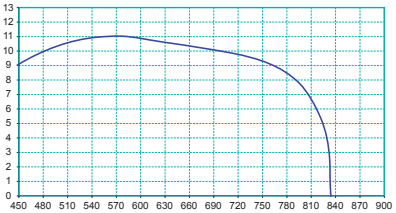
		LPV345F LTE	LP345HV LTE
Code		217250	216268
Elements	No.	9+9	16+16
Bands		3 / UHF	3 / UHF
Channels		E5-E12 / E21-E60	E5-E12 / E21-E60
Freq. band	MHz	174-230 / 470-790	174-230 / 470-790
Gain	dBi	9 / 11.5	9 / 11
Front-to-back ratio	dB	24 / 32	24 / 32
Return loss	dB	-18 / -13	-13 / -13
Beamwidth (-3dB)	°	±23 / ±21	±34 / ±31
Wind load at 120Km/h (720N/m2)	Kg (N)	2.8 (27.46)	3.9 (38.25)
Connector	Type	F	Clamp
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	65 x 79	111 x 86
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	0.85	1.04
Total weight with packaging	Kg	17.5	21.3
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

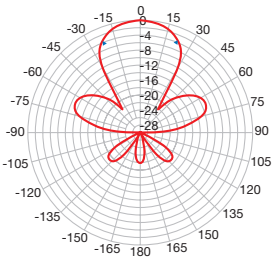
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





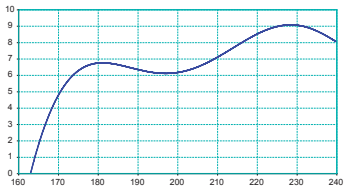
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)

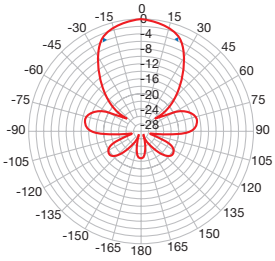


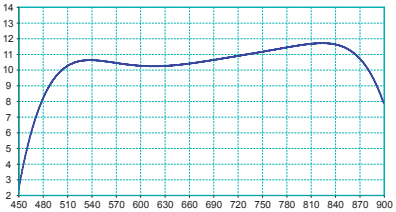


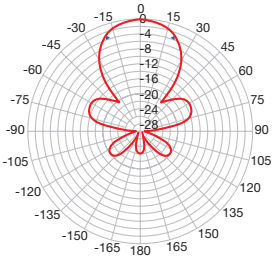
LPV345F LTE

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



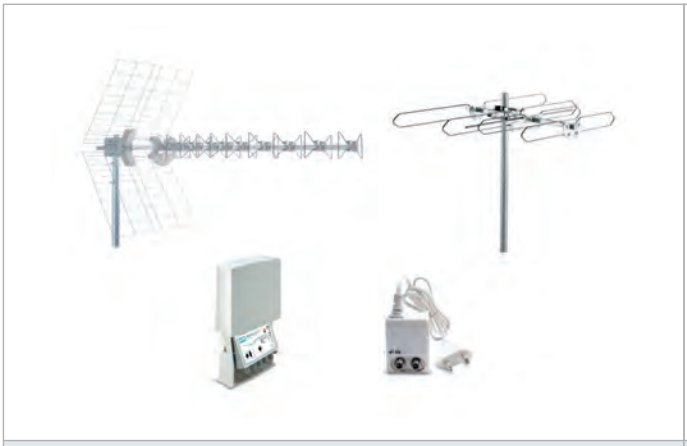




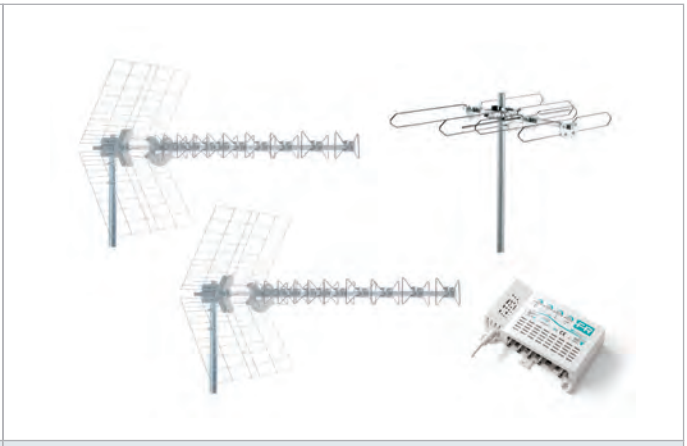


LP345HV LTE

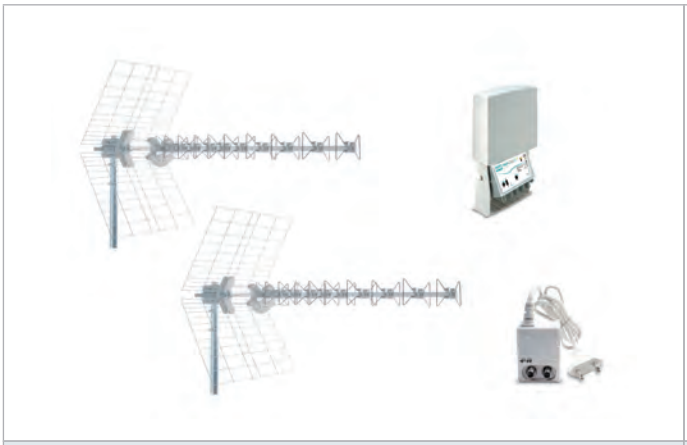
LTE KIT



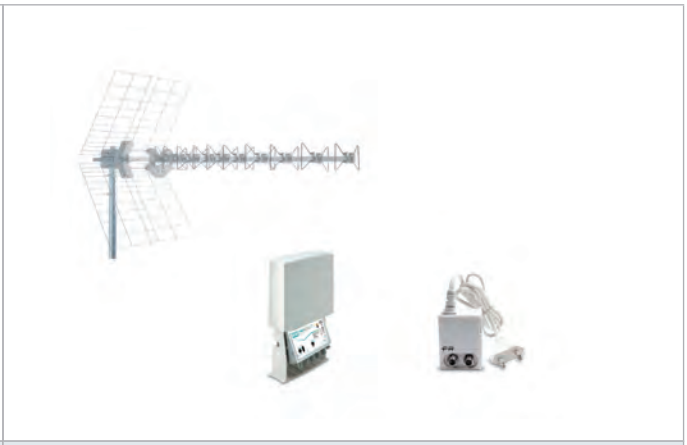
KIT 1 EVO
217935
Composed by 1 BLU10HD LTE + 1 BLV4F + 1 MAP2r345U LTE + 1 MINIPOWER12P



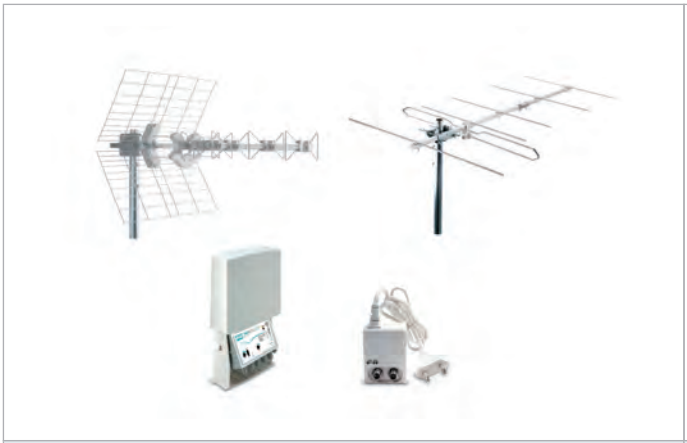
KIT 2 LTE
217922
Composed by 2 BLU10HD LTE + 1 BLV4F + 1 MAP2r345U LTE + 1 MINIPOWER12P



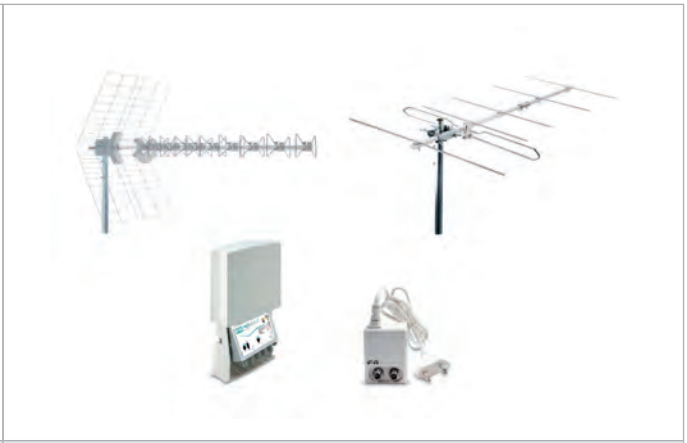
KIT 3 EVO
217936
Composed by 2 BLU10HD LTE + 1 MAP2r345U LTE + 1 MINIPOWER12P



KIT 4 EVO
217937
Composed by 1 BLU10HD LTE + 1 MAP2r345U LTE + 1 MINIPOWER12P



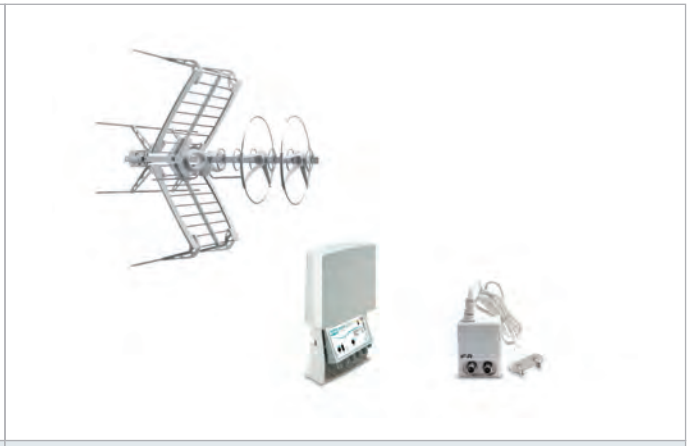
KIT 6 EVO
217938
Composed by 1 BLU 5 HD LTE + 1 TERZA 6HD + 1 MAP3r3UU LTE + 1 MINIPOWER12P



KIT 7 EVO
217939
Composed by 1 BLU 10 HD LTE + 1 TERZA 6HD + 1 MAP3r3UU LTE + 1 MINIPOWER12P

LTE KIT

KIT 8 EVO
217940
Composed by 1 ELIKA + 1 BLV6F + 1 MAP3r3UU LTE + 1 MINIPOWER12P



KIT 9 EVO
217941
Composed by 1 SIGMA COMBO LTE + 1 MAP2r3+U LTE + 1 MINIPOWER12P

KIT 10 EVO
217942
Composed by 1 ELIKA + 1 BLV6F + 1 MAP2r345U LTE + 1 MINIPOWER12P

KIT 11 EVO
217943
Composed by 2 ELIKA + 1 MAP3r3UU LTE + 1 MINIPOWER12P

KIT 12 EVO
217944
Composed by 2 ELIKA + 1 MAP2r345U LTE + 1 MINIPOWER12P

KIT 13 EVO
217945
Composed by 1 BLU COMBO LTE + 1 MAP2r3+U LTE + 1 MINIPOWER12P

UHF

LP Series

Log-periodic pre-assembled aerials characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.

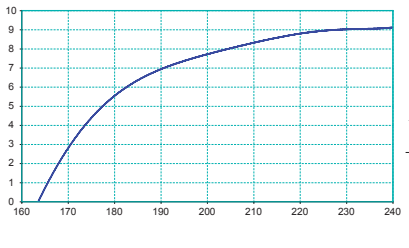
Due to the specific mast clamp these aerials can be assembled in **vertical or horizontal polarisation without additional accessories**

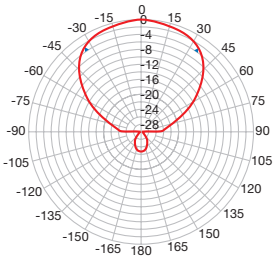
LP345HV

LPV345HV

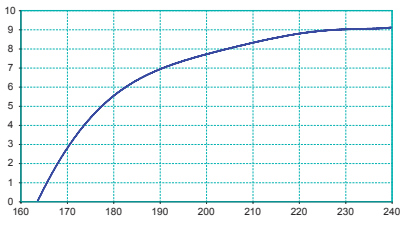
		LP345HV	LPV345HV
Code		216168	217349
Elements	No.	16	9
Bands		3+UHF	3+UHF
Channels		E5-E12 / E21-E69	E5-E12 / E21-E69
Freq. band	MHz	174-230 / 470-862	174-230 / 470-862
Gain	dBi	9 / 11	9 / 11.5
Front-to-back ratio	dB	24 / 32	24 / 32
Return loss	dB	-13 / -13	-18 / -18
Beamwidth (-3dB)	°	±34 / ±31	±23 / ±21
Wind load at 120Km/h (720N/m2)	Kg (N)	3.9 (38.25)	3.9 (38.25)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	111 x 86	111 x 86
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	1.04	0.80
Total weight with packaging	Kg	21.3	16.5
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

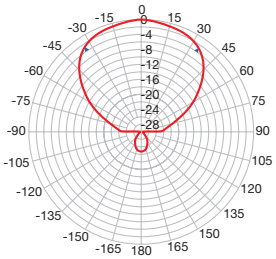
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





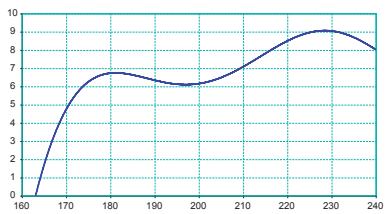
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)

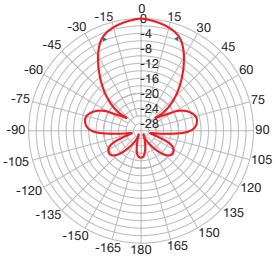




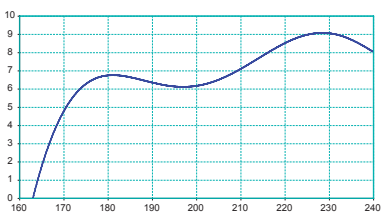
LP345HV

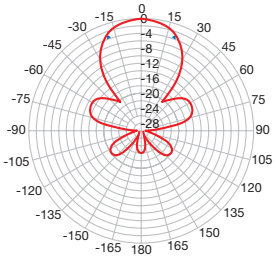
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)





Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



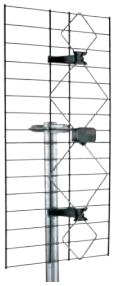


LPV345HV

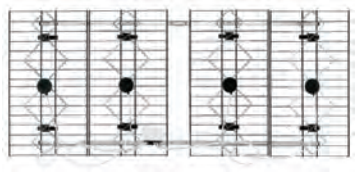
UHF

PANNELLO Series

UHF band single and multiple **panels** aerials complete with F connector.
Thanks to very low vertical section it is possible to install these aerials also on **particular weather conditions**, for example where it snows



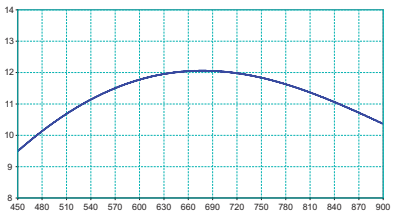
PU4F

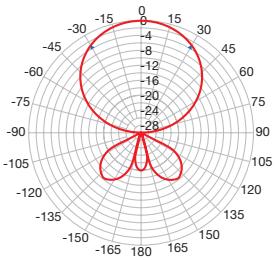


PU16F

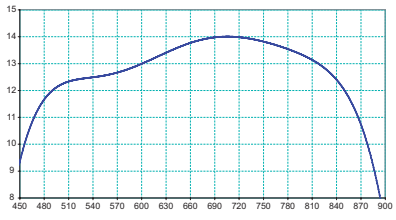
		PU4F	PU4AF	PU8F	PU16F
Code		217424	217423	217428	217436
Elements	No.	4	4	8	16
Bands		UHF	UHF	UHF	UHF
Channels		E21-E69	E21-E69	E21-E69	E21-E69
Freq. band	MHz	470-862	470-862	470-862	470-862
Gain	dBi	12	14	16	18.5
Front-to-back ratio	dB	21	20	26	28
Return loss	dB	-14	-14	-10	-10
Beamwidth (-3dB)	°	±30	±24	±15	±10
Wind load at 120Km/h (720N/m2)	Kg (N)	4.0 (39.24)	5.0 (49.05)	13 (127.53)	26 (255.06)
Connector	Type	F	F	F	F
Impedance	Ohm	75	75	75	75
Max mast diameter Ø	mm	60	60	60	60
Dimensions	cm	71 x 38	50 x 76	88.5 x 72	167 x 72
Multiple packaging quantity	Pcs	15	10	1	1
Unit weight	Kg	0.96	1.30	2.90	5.28
Total weight with packaging	Kg	14.8	13.3	2.9	5.3
Accessories					
Horizontal polarisation		Included	Included	Included	Included
Horizontal polarisation with tilt adjustment		N/A	N/A	N/A	N/A
Vertical polarisation		PVP (210002)	PVP (210002)	N/A	N/A
Vertical polarisation with tilt adjustment		N/A	N/A	N/A	N/A
Auxiliary boom		N/A	N/A	N/A	N/A

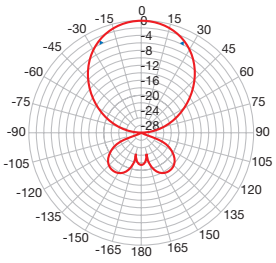
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



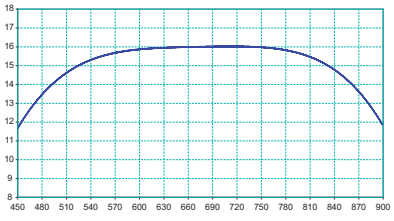


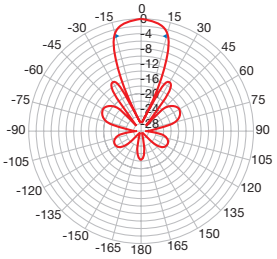
PU4F



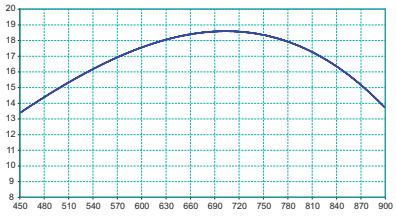


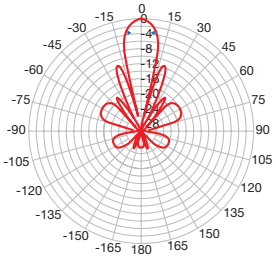
PU4AF





PU8F



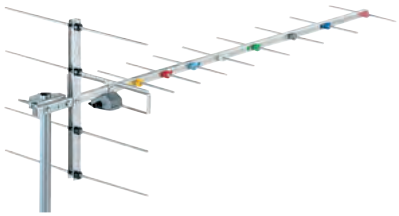


PU16F

UHF

YAGI CHANNEL GROUPED Serie

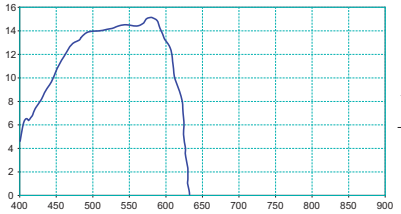
Yagi **channel grouped** aerials complete with F connector.
Easy to ship and stockpile thanks to packaging compact dimensions

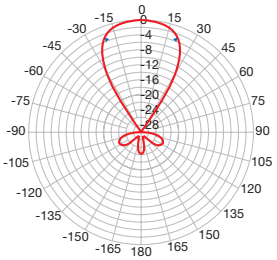


10F2734

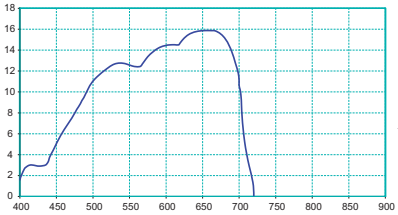
		10F2734	10F3546
Code		219532	219541
Elements	No.	10	10
Bands		-	-
Channels		E27-E34	E35-E46
Freq. band	MHz	518-582	582-678
Gain	dBi	15	16
Front-to-back ratio	dB	25	30
Return loss	dB	-23	-21
Beamwidth (-3dB)	°	±21	±20
Wind load at 120Km/h (720N/m2)	Kg (N)	2.6 (25.48)	2.4 (23.52)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	42 / 60	42 / 60
Dimensions	cm	111 x 32	110 x 28
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	0.70	0.62
Total weight with packaging	Kg	14.4	12.8
Accessories			
Horizontal polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Horizontal polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)
Vertical polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Vertical polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)
Auxiliary boom		N/A	N/A

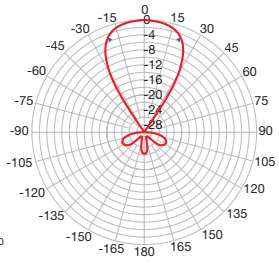
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@560MHz)



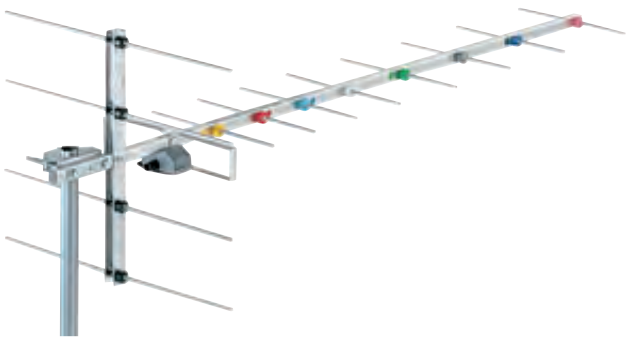


Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@650MHz)





10F2734 **10F3546**



UHF

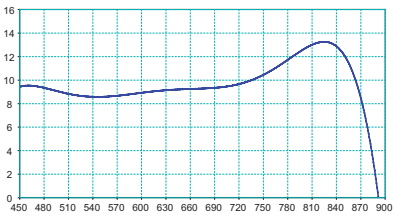
YAGI GRID Serie

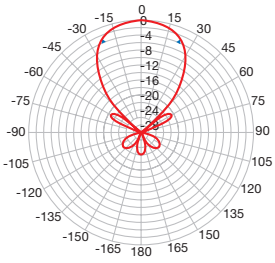
IV, V or UHF band Yagi aerial complete with F connector and grid reflectors.
Easy to ship and stockpile thanks to packaging compact dimensions

10RD45F

		10RD45F	10RD4F	10RD5F
Code		219546	219506	219507
Elements	No.	10	10	10
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	13	14	13.5
Front-to-back ratio	dB	24	26	24
Return loss	dB	-20	-22	-18
Beamwidth (-3dB)	°	±26	±25	±24
Wind load at 120Km/h (720N/m2)	Kg (N)	2.5 (24.52)	2.9 (28.44)	2.5 (24.52)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	42 / 60	42 / 60	42 / 60
Dimensions	cm	99 x 36	137x36	103x36
Multiple packaging quantity	Pcs	20	20	20
Unit weight	Kg	0.50	0.62	0.50
Total weight with packaging	Kg	13.0	15.4	13
Accessories				
Horizontal polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Horizontal polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Vertical polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Vertical polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Auxiliary boom		N/A	N/A	N/A

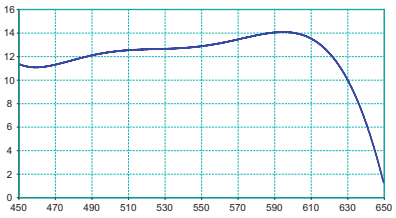
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)

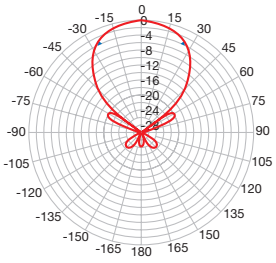




10RD45F

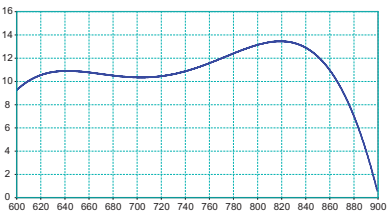
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

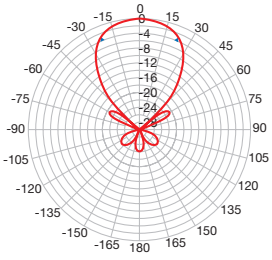




10RD4F

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)





10RD5F

UHF

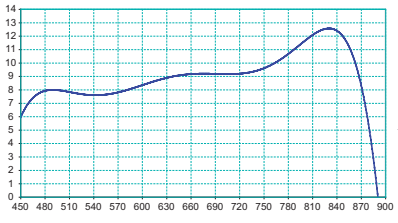
YAGI TUBE Serie

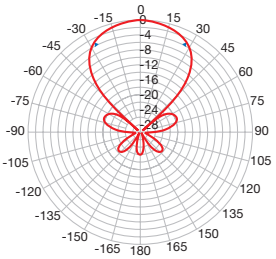
IV, V or UHF band Yagi aerial complete with F connector and tube reflectors.
Easy to ship and stockpile thanks to packaging compact dimensions

10BL45F

		10BL45F	10BL4F	10BL5F
Code		219446	219406	219407
Elements	No.	10	10	10
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	12.5	14	13.5
Front-to-back ratio	dB	24	27	22
Return loss	dB	-16	-22	-17
Beamwidth (-3dB)	°	±28	±24	±27
Wind load at 120Km/h (720N/m2)	Kg (N)	2.3 (22.56)	2.8 (27.46)	2.3 (22.56)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	42 / 60	42 / 60	42 / 60
Dimensions (lxh)	cm	94 x 36	135 x 36	103 x 28
Multiple packaging quantity	Pcs	20	20	20
Unit weight	Kg	0.63	0.75	0.61
Total weight with packaging	Kg	15.5	18.0	15.2
Accessories				
Horizontal polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Horizontal polarisation with tilt adj.		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Vertical polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Vertical polarisation with tilt adj.		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Auxiliary boom		N/A	N/A	N/A

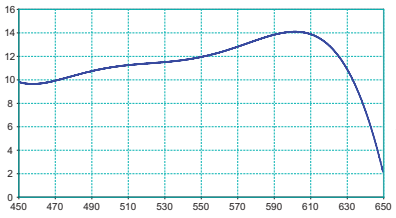
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)

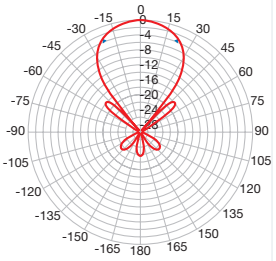




10BL45F

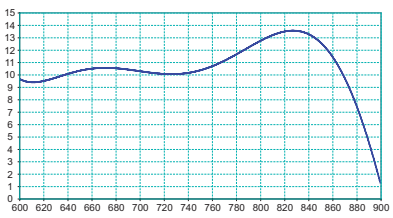
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

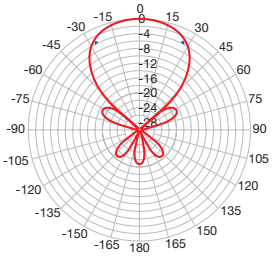




10BL4F

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)





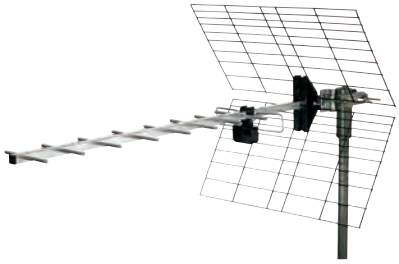
10BL5F

UHF

TAU GRID Serie

IV, V or UHF band Yagi aerial complete with F connector and grid reflectors.

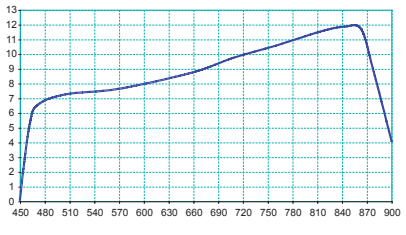
Particular mechanical strength thanks to 8mm extruded aluminium tubes

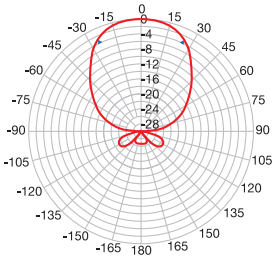


TAU11/45

		TAU11/45	TAU11/4	TAU11/5
Code		213101	213096	213097
Elements	No.	8	8	8
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	12	13.5	12
Front-to-back ratio	dB	28	31	30
Return loss	dB	-16	-20	-17
Beamwidth (-3dB)	°	±23	±24	±23
Wind load at 120Km/h (720N/m2)	Kg (N)	3.2 (31.39)	3.7 (36.29)	3.2 (31.39)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	97 x 50	115 x 50	87 x 50
Multiple packaging quantity	Pcs	10	10	10
Unit weight	Kg	1.28	1.30	1.18
Total weight with packaging	Kg	14.8	15.0	13.8
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

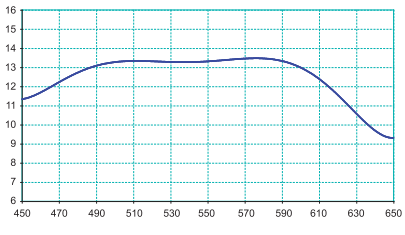
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)

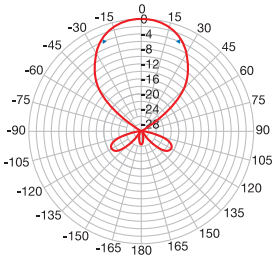




TAU11/45

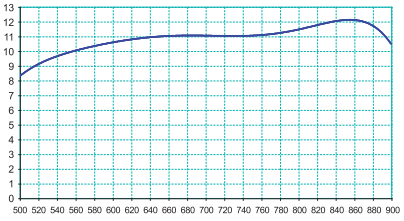
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

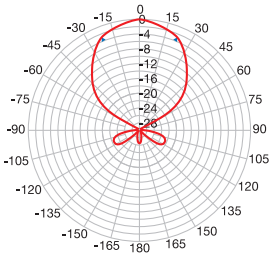




TAU11/4

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)





TAU11/5

UHF

TAU TUBE Serie

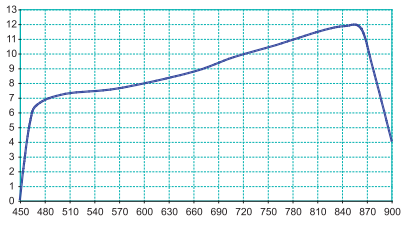
IV, V or UHF band Yagi aerial complete with F connector and tube reflectors.

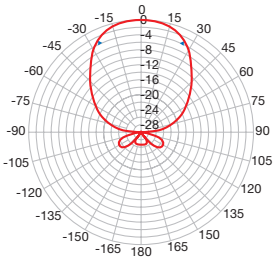
Particular mechanical strength thanks to 8mm extruded aluminium tubes

TAU15/45

		TAU15/45	TAU15/4	TAU15/5
Code		213100	213094	213095
Elements	No.	8	8	8
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	12	13.5	11
Front-to-back ratio	dB	24	24	28
Return loss	dB	-14	-20	-16
Beamwidth (-3dB)	°	±25	±25	±26
Wind load at 120Km/h (720N/m2)	Kg (N)	2.8 (27.46)	3.3 (32.37)	2.8 (27.46)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	98 x 42	115 x 42	87 x 42
Multiple packaging quantity	Pcs	10	10	10
Unit weight	Kg	1.00	1.06	0.96
Total weight with packaging	Kg	12.0	12.6	11.6
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

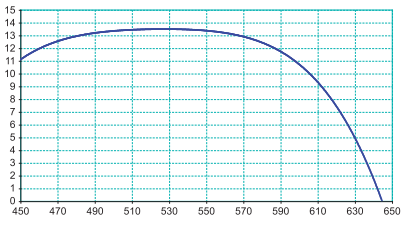
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)

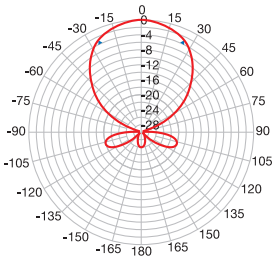




TAU15/45

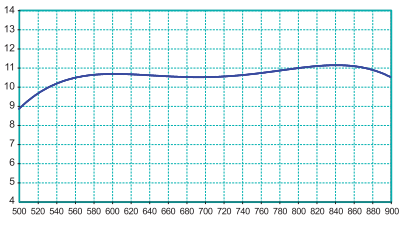
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

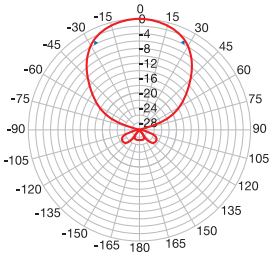




TAU15/4

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)





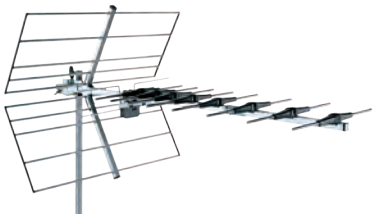
TAU15/5

UHF

OMEGA Serie

UHF band biconical aerial complete with F connector and grid reflectors.

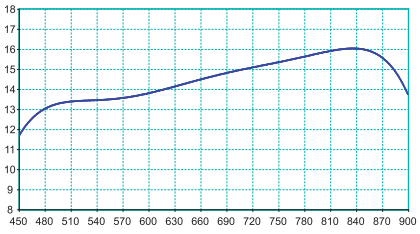
Particular mechanical strength thanks to 8mm extruded aluminium tubes

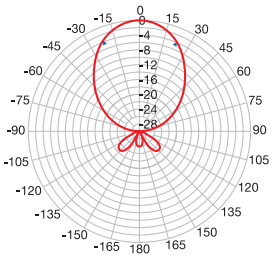


OMEGA8

		OMEGA8
Code		213022
Elements	No.	8
Bands		UHF
Channels		E21-E69
Freq. band	MHz	470-862
Gain	dBi	16
Front-to-back ratio	dB	32
Return loss	dB	-18
Beamwidth (-3dB)	°	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	5.5 (53.95)
Connector	Type	F
Impedance	Ohm	75
Max mast diameter Ø	mm	60
Dimensions	cm	107 x 58
Multiple packaging quantity	Pcs	2
Unit weight	Kg	1.78
Total weight with packaging	Kg	3.6
Accessories		
Horizontal polarisation		Included
Horizontal polarisation with tilt adjustment		Included
Vertical polarisation		Included
Vertical polarisation with tilt adjustment		Included
Auxiliary boom		CA2 (219602)

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



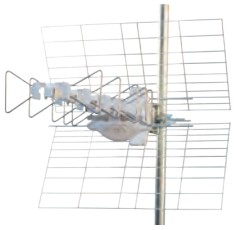


OMEGA8

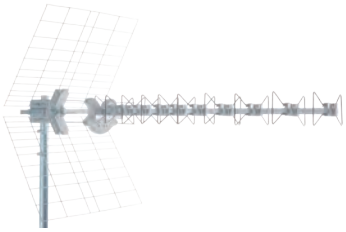
UHF

BLU Serie

UHF band biconical aerial complete with F connector and grid reflectors.
The BLU series can be mounted on a pole **Tools less mounting** BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **wingnut.**.



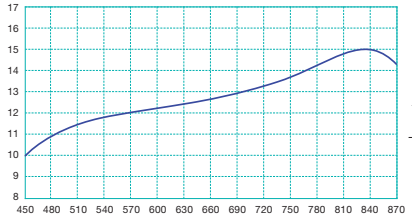
BLU5HD

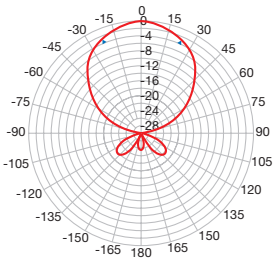


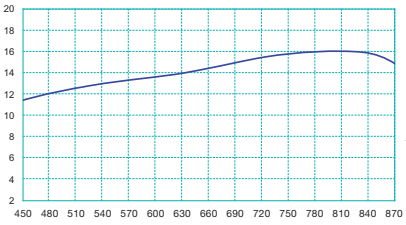
BLU10HD

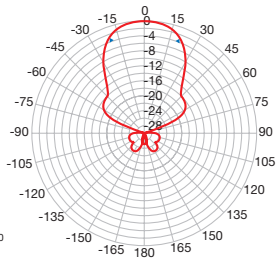
		BLU5HD	BLU10HD	BLU 10B4	BLU 10B5
Code		217901	217902	217903	217904
Elements	No.	5	10	10	10
Bands		UHF	UHF	4	5
Channels		E21-E69	E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-862	470-606	606-862
Gain	dBi	15	16	13	16
Front-to-back ratio	dB	30	30	27	28
Return loss	dB	-16	-16	-20	-22
Beamwidth (-3dB)	°	±25	±22	±22	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	5.7 (55.86)	7.2 (70.56)	7.2 (70.56)	7.2 (70.56)
Connector	Type	F	F	F	F
Impedance	Ohm	75	75	75	75
Max mast diameter Ø	mm	60	60	60	60
Dimensions	cm	84 x 50	119 x 50	122 x 50	119 x 50
Multiple packaging quantity	Pcs	10	10	10	10
Unit weight	Kg	1.72	2.27	2.52	2.28
Total weight with packaging	Kg	17.2	22.7	25.2	22.8
Accessories					
Horizontal polarisation		Included	Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included	Included
Vertical polarisation		Included	Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included	Included
Auxiliary boom		N/A	N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)

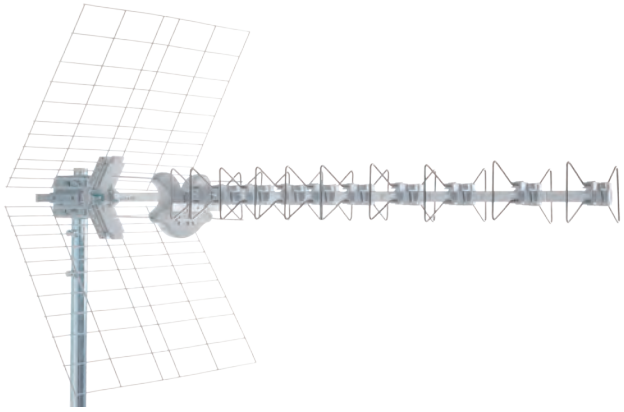








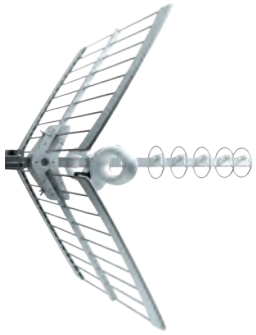
BLU5HD **BLU10HD**



UHF

SIGMA Series

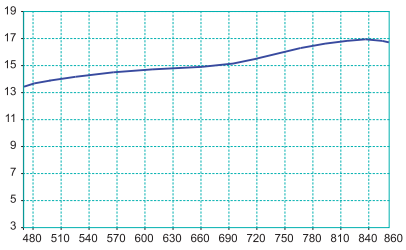
UHF band Loop Yagi aerial complete with F connector.
Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut.**
High gain, **excellent directivity** and almost total absence of
side lobes.
Exclusive design patented by Fracarro.

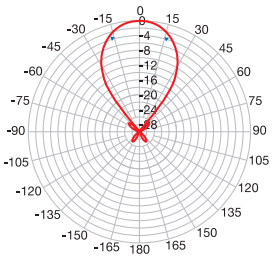


SIGMA 6HD

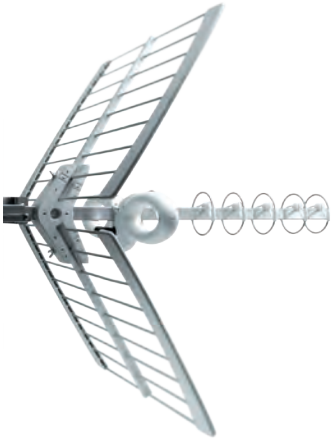
		SIGMA 6HD
Code		213201
Elements	No.	6
Bands		UHF
Channels		E21-E69
Freq. band	MHz	470-862
Gain	dBi	17
Front-to-back ratio	dB	32
Return loss	dB	-18
Beamwidth (-3dB)	°	±18
Wind load at 120Km/h (720N/m2)	Kg (N)	23 (225.4)
Connector	Type	F
Impedance	Ohm	75
Max mast diameter Ø	mm	60
Dimensions	cm	92 x 63
Multiple packaging quantity	Pcs	4
Unit weight	Kg	2.30
Total weight with packaging	Kg	12.0
Accessories		
Horizontal polarisation		Included
Horizontal polarisation with tilt adjustment		Included
Vertical polarisation		Included
Vertical polarisation with tilt adjustment		Included
Auxiliary boom		N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)





SIGMA 6HD



MAST

TELESCOPIC MASTS

Telescopic masts with cap.
Hot-dipped zinc coating.

TEL1.5/4

Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
TEL1.5/4	287243	1.5	2+2=4	25+30	5
TEL2/4	287241	2	2+2=4	28+35	3
TEL2/6	287242	2	2x3=6	28+35+42	2

MASTS WITHOUT NUTS

Masts without nuts with cap.
Hot-dipped zinc coating.

PaloSB2 1.5/25

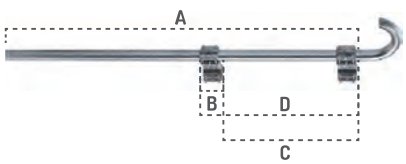
Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
PaloSB2 1.5/25	287244	1.5	2	25	10
PaloSB2 2/28	287245	2	2	28	5
PaloSB3 2/28	287246	2	3	28	5

PaloCB2 1.5/30

Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
PaloCB2 1.5/30	287247	1.5	2	30	5
PaloCB2 1.5/35	287248	1.5	2	35	5
PaloCB2 1.5/40	287249	1.5	2	40	5
PaloCB2 2/35	287250	2	2	35	5
PaloCB2 2/42	287251	2	2	42	5
PaloCB2 2/50	287252	2	2	50	3
PaloCB3 2/35	287253	2	3	35	3
PaloCB3 2/42	287254	2	3	42	3
PaloCB3 2/50	287255	2	3	50	2
PaloCB2 3/60	287256	3	2	60	2
PaloCB3 3/60	287257	3	3	60	1

ELBOW MASTS

Elbow shapped masts with removable elbow,
Hot-dipped zinc coating



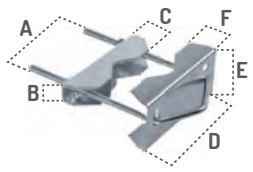
Pal curva40+ATT

Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
Pal curva40+ATT	287258	2	2	40	1
Pal curva50+ATT	287259	2	2	50	1

AERIAL ACCESSORIES

RAILING MASTS

Mast bracket for railing mast, Electrolytic zinc coating.



ZNRING

Item	Code	Features	Packing Pcs
ZNRING	287271	Mast bracket for railing mast A: 80 mm, B: 45 mm, C: 15 mm, D: 80 mm, E: 30 mm, F: 25 mm Reverse toothed stirrup 2,3 mm tickness M6 Clevis Ø 30÷55 mm Masts	70

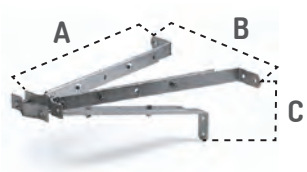
ZNESPTU10

Item	Code	Features	Packing Pcs
ZNESPTU10	287260	A: Total length 10cm B: Holes spacing 63 mm Clevis: tape 30x3 mm, nuts: M6x45 mm MAST clampi Ø 25÷45 mm,Tube Ø 18x1,5 mm.	50
ZNESPTU15	287261	A: Bracket total length 15 cm B: Holes spacing 63 mm Growing screw M10 (Ø 18x 60 mm)	50
ZNESPTU20	287262	A: Total length 20cm B: Holes spacing 63 mm Clevis: tape 30x3 mm, nuts: M6x45 mm MAST clampi Ø 25÷45 mm,Tube Ø 18x1,5 mm, growing screws M10 (Ø 18x 60 mm)	50
ZNESPT010	287268	A: Total length 10cm B: Holes spacing 95 mm Clevis: tape 30x4 mm, nuts: M8x60 mm MAST clampi Ø 30÷60 mm,cylinder Ø 18mm, growing screws M10 (Ø 18x 60 mm)	50
ZNESPT015	287269	A: Bracket total length 15 cm B: Holes spacing 95 mm Clevis: tape 30x4 mm, nuts: M8x60 mm MAST clampi Ø 30÷60 mm,cylinder Ø 18mm, growing screws M10 (Ø 18x 60 mm)	50
ZNESPT020	287270	A: Total length 20cm B: Holes spacing 95 mm Clevis: tape 30x4 mm, nuts: M8x60 mm MAST clampi Ø 30÷60 mm,cylinder Ø 18mm, growing screws M10 (Ø 18x 60 mm)	50

TRIPOD

Mast mount tripod

- Adjustable
- Hot-dipped zinc coating



ZN3PREG

Item	Code	Features	Packing Pcs
ZN3PREG	287272	A: Adjustable from 26 to 42 cm B: min 35 cm - max 43 cm C: min 23 cm - max 33 cm Chassis: flat 30x5mm - 3 connection holes Ø 11 mm Toothted brackets 2,5mm tickness Screws M8x120 mm QST Mast connection Ø 30÷55mm	12

WALLMOUNT BRACKET

Wallmount breckets

- Hot-dipped zinc coating

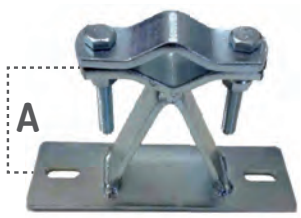
ZNPMEMILIA

Item	Code	Features	Packing Pcs
ZNPMEMILIA	287273	Plate: 250x70x5 mm - 2 mounting holes 20x14 mm Clevis: 40x8 mm - Holes spacing 140 mm Screws : M10x90 mm for masts Ø 40÷90 mm Hot-dipped zinc coating	12
ZNPMECONO	287274	Plate: 170x40x4 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm electrolytic coating	40

AERIAL ACCESSORIES

REINFORCED BRACKETS

Hot-dipped zinc coating reinforced brackets
Reinforced brackets



ZNRINF

Item	Code	Features	Packing Pcs
ZNRINF	287275	Plate: 200x70x5 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm electrolytic coating	15
ZNRINF5	287276	A: 5 cm Chassis plate: 35x6 mm Plate: 200x70x5 mm - 2 mounting holes 20x11 mm Clevis: 35x6 mm - Holes spacing 100 mm Screws: M10x60 mm for masts Ø 30÷60 mm	12
ZNRINF10	287277	A: 10 cm Chassis plate: 35x6 mm Plate: 200x70x5 mm - 2 mounting holes 20x11 mm Clevis: 35x6 mm - Holes spacing 100 mm Screws: M10x60 mm for masts Ø 30÷60 mm	12
ZNRINF20	287278	A: 20 cm Chassis plate: 35x6 mm Plate: 200x70x5 mm - 2 mounting holes 20x11 mm Clevis: 35x6 mm - Holes spacing 100 mm Screws: M10x60 mm for masts Ø 30÷60 mm	10

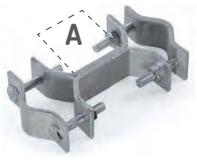
CHEAP BRACKET

Hot-dipped zinc coating cheap brackets

ZNECONO5

Item	Code	Features	Packing Pcs
ZNECONO5	287331	A: 5 cm Chassis plate: 40x8 mm Plate: 170x40x4 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm Hot-dipped zinc coating	25
ZNECONO10	287279	A: 10 cm Chassis plate: 40x8 mm Plate: 170x40x4 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm Hot-dipped zinc coating	25
ZNTELE20	287332	A: Adjustable from 20 to 33 cm Plate: 110x50x4 mm - 2 mounting holes 15x10 mm Inner tube Ø 20x20x1,5 mm Outer tube Ø 25x25x1,5 mm Clevis: 30x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm electrolytic coating	25

CLEVIS



CAV8DIST

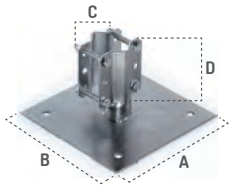
CAV8UNIVERSAL

CAV8

Item	Code	Features	Packing Pcs
CAV8DIST	287280	A: 60 mm - Plate 35x6 mm Clevis: plate 35x6 mm - Holes spacing 100 mm For masts Ø 30÷60 mm •Screws: M10x60 mm	15
CAV8UNIVERSAL	287281	Plate: 90x90x2,5 mm For masts Ø 25÷60 mm Screws: M8x60 mm	25
CAV8	287282	Tape: 30x4 mm Screws: M6x40 mm For masts Ø 25÷60 mm	60

PLATE

Plate for terraces and floors, fire-galvanized.



Slab, terrace plate Hot-dipped zinc coating

Item	Code	Features	Packing Pcs
Slab, terrace plate Hot-dipped zinc coating	287283	A: 200 mm B: 200 mm sp. 3 mm 4 mounting holes Ø 14 mm C: 90 mm D: 90 mm sp. 2,5 mm Screws M8x50 mm for masts Ø 30÷50 mm	20

FRANCE BRACKETS

Chimney brackets (French style) Hot-dipped zinc coating

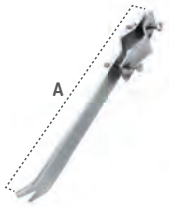
ZNFRCAMNEW28

Item	Code	Features	Packing Pcs
ZNFRCAMNEW28	287285	28 cm Protrusion 160mm For masts Ø 25÷50 mm	20
FRCAM32	287284	32 cm Protrusion 160mm For masts Ø 25÷50 mm	12

WALLMOUNT BRACKET

U shape brackets

- Wall mount
- Reinforced brackets
- electrolytic coating



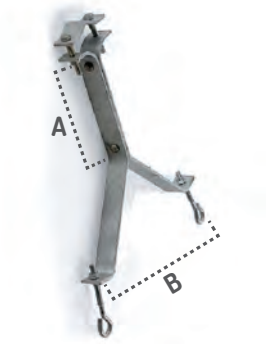
ZNMURO

Item	Code	Features	Packing Pcs
ZNMURO	287288	A: 30cm - U Shape 30x15x4mm Clevis: tape 30x4mm - Holes spacing 95mm Screws: M8x60mm QST For masts Ø 30÷60 mm	25

CHIMNEY BRACKETS

Chimney brackets

- electrolytic coating



ZACAMINO

Item	Code	Features	Packing Pcs
ZACAMINO	287287	A: 14 cm B: 27 cm Tape: 30x3 mm Screws: M6x45 mm QST - Holes M6 Clevis: 30x3mm - Holes spacing 63 mm For masts Ø 25÷45 mm	30

AERIAL ACCESSORIES

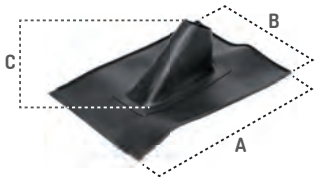
BRACKET ACCESSORIES

Accessories and brackets

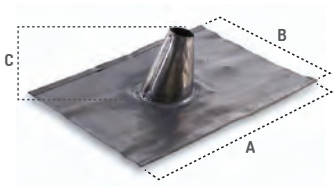
RALLATRIS

TENDIFILO

CONTROPIASTRA

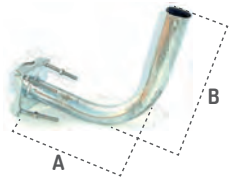


TEGOLAPVC

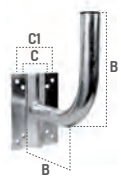


TEGOLAPIOMBO

CAPPUCCIOPVC



SUPUNIVERSAL



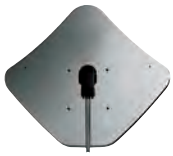
SUPMUR046

Item	Code	Features	Packing Pcs
RALLATRIS	287289	Tape 20x3 mm Screws M6x45 mm QST For masts Ø 25÷45 mm electrolytic coating	100
TENDIFILO	287290	Rope Ø max 5 mm electrolytic coating	100
CONTROPIASTRA	287291	Plate: 250x70x5 mm 6 holes Ø 14 mm ZPNEMILIA Reverse bracket Hot-dipped zinc coating	1
NASTROZNFR	287263	matal taper for Chimney (France style) 25mt reel - tape 40x0.5mm	5
TEGOLAPVC	287292	PVC Tile A: 410 mm B: 300 mm C: 130 mm For mast up to Ø 60 mm	30
TEGOLAPIOMBO	287293	A: 500 mm B: 400 mm C: 170 mm Tickness mm 1 - Lead quality 99,9% PVC cap for masts Ø 40÷80 mm	5
CAPPUCCIOPVC	287294	A: 180 mm For masts Ø 35÷60 mm Soft PVC	200
SUPUNIVERSAL	287264	Tube Ø 40x1,4 mm A: 260 mm B: 250 mm Plate: 100x100x2,5 mm Clevis adn nuts included Vertical and horizontal clamp For masts Ø 25÷76 mm Hot-dipped zinc coating	15
SUPMUR026	287265	Wall mount and mast bracket Tube Ø 40x1,5 mm A: 240 mm B: 230 mm Plate 200x135x4mm Clevis not included 4 mounting holes Ø 10 mm C: 80 mm (holes spacing) 4externae mounting holes Ø 12 mm C1: 95 mm Hot-dipped zinc coating	20
SUPMUR046	287266	Wall mount and mast bracket Tube Ø 40x1,5 mm A:440 mm B: 230 mm Plate 200x135x4mm (clevis not included) 4mounting holes Ø 10 mm C: 80 mm (holes spacing) 4 external mounting holes Ø 12 mm C1: 95 mm (holes spacing) Hot-dipped zinc coating	20
SUPCURV0180G	287267	Bended mast bracket Tube Ø 40x1,5 mm A: 400 mm B: 240 mm C: 350mm Hot-dipped zinc coating	8
PVP	210002	Mast clamp for panel aerials Ø max. 60mm	20
PV10	210011	Vertical mount accessories up to Ø max. 60mm masts. Hot-dipped zinc coating	30
CA2	219602	Auxiliary booms	-
BA914	280674	Base for dish mount (for dishes from Ø da 90 to 140mm) Mast Ø= 76mm	1
STM1	281801	Wall bracket Mast Ø = 40mm Thickness 1,2mm	1
ZPL-R650	287179	Guyed extendable mast Adjustable protrusion from 450 to 650mm	10
ZPL-R450	287180	Guyed extendable mast Adjustable protrusion from 300 to 450mm	12
AN1	293301	Corner saving protection Rope fixings	100
BA6	293400	Plate for telescopic masts 0 Ø 25 - 48mm masts suitable.	20

DISHES

PENTA Serie

Aluminium and steel offset dishes with 68 and 85cm equivalent diameter



			DIGIT	PENTA85
Operating frequencies		GHz	10.7 - 12.75	10.7 - 12.75
Dimensions	Ø	mm	624 x 624	775 x 775
Offset angle		°	22.3	22.1
Efficiency			›70%	›70%
Gain	10.95 GHz	dB	36.5	39
Cross polarization		dB	›37	›38
First side lobe		dB	›-32	›-34
Noise temperature	Elevation 30°	k°	40	40
F/D equivalent ratio			0.7	0.7
Lobe amplitude	3dB		3	2.2
LNB holder		mm	23-28; 40; 60	23-28; 40; 60
Elevation angle			60° Maximum tilt	60° Maximum tilt
Mast mounting		mm	35-80	35-80
Dish material			Aluminium	Aluminium
LNB holder material			Steel - Aluminium/ Zinc treatment	Steel - Aluminium/ Zinc treatment
Wind resistance	150 Km/h	Kg	53	81

Single packaging

equivalent ø	Item	Code	Material	Color	Support 6° dual feed	Mounting kit
68	**DIGIT**	211101	Aluminium	White	DFPDIGIT cod. 211003	ZNCDGT included
68	**DIGIT-G**	211102	Aluminium	Grey	DFPDIGIT cod. 211003	ZNCDGT included
68	**DIGIT-R**	211103	Aluminium	Red	DFPDIGIT cod. 211003	ZNCDGT included
68	**DIGIT-A**	211104	Steel	White	DFPDIGIT cod. 211003	ZNCDGT included
68	**DIGIT-GA**	211105	Steel	Grey	DFPDIGIT cod. 211003	ZNCDGT included
68	**DIGIT-RA**	211106	Steel	Red	DFPDIGIT cod. 211003	ZNCDGT included
85	**PENTA85-A**	211205	Steel	White	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	**PENTA85G-A**	211206	Steel	Grey	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	**PENTA85R-A**	211207	Steel	Red	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	**PENTA85**	211201	Aluminium	White	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	**PENTA85G**	211203	Aluminium	Grey	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	**PENTA85R**	211204	Aluminium	Red	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included

DISHES

60-85 cm OFFSET DISHES Serie

Aluminium and steel offset dishes with 60, 80 and 85cm diameter

P080SCX50

			R060AP	R060A	R080AP	R080SC	R085AP
Dimensions	Ø	mm	630 x 590	632 x 583	632 x 846	810 x 750	910 x 837
Offset angle		°	23	24	23	22.75	21
F/D equivalent ratio			0.65	0.66	0.66	0.66	0.66
Elevation angle			20/55	4/55	0/80	0/50	1/60
Mast mounting		mm	25-50	20-50	30-60	30-60	30-60
Dish material			Steel	Steel	Steel	Steel	Aluminium
Color			White	White	White	White grey	Grey
Efficiency	%		×70%	×69%	×75%	×75%	×70%
Gain	10.7 GHz	dB	34.4	34.7	37.0	37.6	37.4
	11.7 GHz	dB	35.0	35.5	37.7	38.2	38.2
	12.7 GHz	dB	36.4	36.2	38.5	38.6	38.9

Single packaging

equivalent ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
80	**P80APN**	211316	R080SC	Steel	-	-	1
85	**R085AS**	287411	R085AP	Aluminium	DF0100C code 289294	ZN085PX5G cod. 289829 included	1

Programmation web interface

equivalent ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
60	**R060AX10**	280610	R060A	Steel	-	ZN060AC code 289279	10
60	**R060APX400**	287186	R060AP	Steel	-	ZN060AP code 287187	400
80	**P080SCX50**	287402	R080SC	Steel	DF80SC code 287422e	Z080SC cod. 287404 included	50
80	**R080APX50**	289479	R080AP	Steel	DFAN code 289487	ZN080APN code 289480	50
80	**R080APX200**	289283	R080AP	Steel	DFAN code 289487	ZN080APN code 289480	200
85	**R085AS**	287411	R085AP	Aluminium	DF0100C code 289294	ZN085PX5G cod. 289829 included	1
85	**R085APX5G**	289828	R085AP	Aluminium	DF0100C code 289294	ZN085PX5G code 289829	5

DISHES

100-150 cm OFFSET DISHES Serie

Aluminium and steel offset dishes with 100 and 150cm diameter

R0100AP

			R0100C	RO-100AC	R0100AP	R0120N	R0125AP	R0150
Dimensions	Ø	mm	970 x 1040	970 x 1040	1032 x 952	1164 x 1240	1345 x 1240	1614 x 1488
Offset angle		°	21	21	23	23	23	21.3
F/D equivalent ratio			0.66	0.66	0.66	0.66	0.66	0.66
Elevation angle			0/80	0/80	0/90	20/50	0/90	20/90
Mast mounting		mm	30-90	30-90	35-60	55-100	40-60	55-100
Dish material			Aluminium	Steel	Aluminium	Aluminium	Aluminium	Aluminium
Color			White grey	White	Grey	White	Grey	White
Efficiency	%		×70%	×70%	×72%	×70%	×74%	×70%
Gain	10.7 GHz	dB	39.7	39.7	39.4	40.5	41.0	42.6
	11.7 GHz	dB	40.2	40.2	40.0	41.4	41.6	43.4
	12.7 GHz	dB	40.5	40.5	40.6	42.3	42.4	44.2

Single packaging

equivalent ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
100	**PT100C**	289291	R0100C	Aluminium	DF0100C code 289294	ZN0100C code 289285 included	1
150	**R0150**	289139	R0150	Aluminium	DF0120N code289199	AZ0150 code 289140	1
100	**PT100AC**	289293	R0100AC	Steel	DF0100C code 289294	ZN0100C code 289285 included	1
120	**R0120N**	289197	R0120N	Aluminium	-	AZ0120N code 289196 AZ0120N-PP code 289949	1

Multiple packaging

equivalent ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
100	**R0100ACX6**	289299	R0100AC	Steel	DF0100C code 289294	ZN0100C code 289285	6
100	**R0100APX5G**	289830	R0100AP	Aluminium	DFAN code 289487	ZN0100PX5 code 289831	5
125	**R0125APX3G**	289832	R0125AP	Aluminium	-	ZN0125PX3 code 289833	3

Wind resistance is referred to dish diameter @120Km/h (kg)

Equivalent Ø cm	60	65	75	80	85	90	100	120	150
Wind resistance	34	42	47	55.2	70	80	91	145	235

LNB

UNIVERSAL LNB Serie

UX LNB Serie guarantees an optimal signal reception and they fulfil every system requirements: from single distribution to complex multiuser or hospitality plants

UX-S LTE

UX-QT LTE

Item	Code	Description	Outputs	Gain	Consumption	Lte protection
UX-S LTE	287337	Single LNB with 1 universal output and LTE shielding, **Sky Italy approved**	1	60	110	-54
UX-TW LTE	287338	Twin LNB with 2 universal outputs and LTE shielding	2	60	150	-54
UX-QD LTE	287339	Quad LNB with 4 universal outputs and LTE shielding, **Sky Italy approved**	4	60	190	-54
UX-OCTO LTE	287340	Octo LNB with 8 universal outputs and LTE shielding	8	55	200	-54
UX-QT LTE	287302	Quattro LNB with 4 separate polarities outputs H/V and LTE shielding, **Sky Italy approved**	4	57	160	60
UX-MBS6	287139	6° monoblock LNB with 1 universal output	1	55	110	-
UX-MBTW6	287140	6° monoblock LNB with 2 universal outputs	2	55	190	-
UX-MBQD6	287141	6° monoblock LNB with 4 universal outputs	4	55	190	-

LNB

SCD2 (dCSS) LNB Serie

#b#SCD2 (dCSS) LNB#b# with 1 output which is able to serve up to 4 SCR SAT receivers and, at the same time, 12 frequencies used by **new SCD2 (dCSS) decoders**; both functionalities using only one cable. It can be used to increase the number of TV services.

SCD2-16LNB

		SCD2-16LNB
Code		287421
Input frequency	GHz	10.7-11.7 / 11.7-12.75
Outputs		1
Users		4 SCR, 12 SCD2 (dCSS)
Output frequency	MHz	1210, 1420, 1680, 2040 (comply with EN50494 standard) 985, 1050, 1115, 1275 1340, 1485, 1550, 1615 1745, 1810, 1875, 1840 (comply with EN50607 standard)
Gain	dB	65
Output level for each transponder	dBµV	84
Supply voltage	V	11.5 - 19
Consumption	mA	360

Installation example

SATELLITE KIT

KIT SAT Serie

Satellite KIT with: dish, mounting kit and LNB

KIT P80APK

Item	Code	Description
KIT P80APK	211308	Composed by: 1 R080SC + 1 Z080SC + 1 UX-S LTE
KIT P85AK	211220	Composed by: 1 PENTA85-A + 1 UX-S LTE
KIT SAT21601	211311	Composed by: 1 R060AP + 1 ZN060AP + 1 UX-S LTE
KIT 9/13 R080	211319	Composed by: 1 R080 + 1 ZN080 + 1 DFP 9-13 + 1 MB3UZ

DISH ACCESSORIES

DiSEqC Serie

Line switch controlled with DiSEqC commands on coaxial cable, controlled by SAT receivers through DiSEqC commands.

- They allow to switch through 2 or 4 LNBs using digital commands generated by SAT receivers on coaxial cable (for example: Hotbird 13°E and Astra 19,2°E)
- Included plastic cover for external use

		DSQ21J	DSQ41J
Code		289588	289589
Bands		950 - 2300	950 - 2300
Inputs	No.	2	4
Outputs	No.	1	1
Through loss	dB	4	4
DiSEqC		2.0	2.0
Isolation	dB	35	35
Quantity	Pcs.	1	1

DSQ21J DSQ41J

DISH ACCESSORIES

AMPLIFIER Serie

SAT line amplifier

AS20

		AS20
Code		284013
Bands	MHz	950 - 2150
Gain	dB	12-17
Noise figure	dB	8
Operating voltage	V	13 - 18
Consumption	mA	40@13V
Impedance	Ohm	75
Connector		F female
Fixed output level	dBµV	105
Quantity	Pcs.	1
Dimensions	mm	1 x 1.5 x 70

Electronic Mast and indoor eequipment

Electronic Mast and indoor eequipment

LTE FILTERS

LTE FIlter 60

LTE and FM Filters

FM and LTE indoor/outdoor filters developed to **reduce the interferences coming from any eventual LTE (4G) and FM signals** . Availabe with cutoff frequencies as 790MHz or 694MHz.

- High selsctivity filetrs for LTE or FM designed to limit the interfernces coming from indesidered signals
- Low inserttion loss
- IP66 outdoor mounting
- Single input and output

Item	Code	IN	Bands (MHz)	Return loss (dB)	Insertion loss (dB)	Selectivity (dB)	Filtered band (MHz)	Pack. Pcs	Dimensions (mm)
LTE FIlter 60	226709	1	47-790	<-10	1.5	30 (801MHz)	801 - 862	1	70 x 20 x 20
LTE Filter 59	226711	1	47-782	<-10	1.5	30 (791MHz)	791 - 862	1	70 x 20 x 20
LTE Filter 48	226715	1	47-694	<-10	1.5	30 (704MHz)	704 - 862	1	70 x 20 x 20
FM Filter	226714	1	108-862	<-12	1.5	30 (88-108MHz)	87 - 108	1	70 x 20 x 20
MX Filter 700	226716	1	DC-694	<-13	< 2	> 25	733 - 862	1	107 x 60 x 95

Couper and Mixers

MX201

MX Series

Mixers and coupler with 2 or 3 inputs

- Metal chassis completelly shielded
- 75 ohm impedaces
- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Dimensions 95x60x105 mm.
- (*) special tuning

Item	Code	IN	IN 1	IN 2	IN 3	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Loss IN3 (dB)	Pack. Pcs
MX201	223201	2	VHF + DC	UHF	-	1	20	0.2	0.2	-	6
MX202	223202	2	VHF + UHF + DC	VHF + UHF (selectable DC)	-	1	10	4	4	-	1
MX203	223203	2	VHF + DC	UHF	-	2	10	3.5	3.5	-	1
MX205	223217	2	VHF + UHF	SAT + DC	-	1	15	0.5	1	-	1
MX206	223218	3	I + FM	III+DAB	UHF + DC	1	15	0.5	0.5	1	1
MX210	223222	3	VHF	IV	V + DC	1	15	0.5	1	1	1
MX210/..*	223223	3	VHF	IV	V + DC	1	15	0.5	1	1	1
MX211	223221	3	VHF	UHF	UHF + DC	1	15	0.5	4	4	1

Couper and Mixers

ESV45

ESV Series

2 or 3 inputs mast mixers, can be installed as demixers using the output as imputs.

- Mast strap up to 60mm
- 75 ohm impedaces
- Working temperature from -10 to 55°C.

Item	Code	IN	IN 1	IN 2	IN 3	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Loss IN3 (dB)	Pack. Pcs
ESV45	226804	3	VHF	IV (21-35)	V (39-69) + DC	1	10	0.5	1	1	10
ESVUU	226806	3	VHF	UHF + DC	UHF	1	10	0.5	4	4	10
ESVU	226801	2	VHF	UHF + DC	-	1	10	1	1	-	10

Indoor mixers

JSVU3

JSVU Series

Indoor mixer VHF/UHF

- Die cast housing fully shielded
- Working temperature from -10 to 55°C.

Item	Code	IN	IN 1	IN 2	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Pack. Pcs
JSVU3	223109	2	VHF + S (40-446 MHz)	UHF (470-862)	1	10	1	1	20

Indoor mixers

MXST

MIX TV+SAT series

Indoor TV /SAT mixers; can be used also as demixer connecting the input to the "MIX". Due versions standard and High Isolation standard e ad alto isolamento tra gli ingressi.

- High islation between inputs
- Working temperature from -10 to 55°C.

Item	Code	IN	IN 1	IN 2	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Pack. Pcs
MXST	226400	2	TV (47-862 MHz)	SAT + DC (950-2150MHz)	1	15	0.5	0.5	20
PAS0303011	PAS0303011	2	TV (47-862 MHz)	SAT + DC (950-2150MHz)	1	10	0.5	0.5	1

Electronic Mast and indoor eequipment

Mast amplifier

ES1/RVU

ES series

Mast amplifier for signals coming from different aerials. The amplifier are remotely feeded by 12Vdc un the output connector.

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Dimensions: 74x36x58mm.

Item	Code	IN	Frequency (MHz)	Gain (dB)	Out. Lev. (dBµV)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
ES1/Q	226905	1	174 - 862	12	115	4	28	10
ES1/RVU	226909	2	470 - 862	12	115	4	27	10
ES2/Q	226913	1	174 - 862	22	115	4	50	10
ES2RT	226912	1	47 - 862	23	115	4	50	10
ES2/RU	226917	1	470 - 862	25	115	4	55	10

Mast amplifier

JS2RT

JS2RT Sereis

Fully shielded die cast housing mast amplifier. The amplifier are remotely feeded by 12Vdc un the output connector.

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Dimensions:115x55x103mm

Item	Code	IN	Input bands	Frequency MHz	Gain dB	Out. Lev. dBµV	Adj. dB	Noise figure dB	Current cons. (mA)	Pack. Pcs
JS2RT	223101	1	III+DAB + UHF	-	12	115	-	4	60	10

Mast amplifier

MAP4r3+U LTE+

MAP EVO Series

Fully shielded die cast housing mast amplifier to mix and amplify signals cominf from deifferent aeriale
Die cast housing with metal frame cover to prevent any interference.
"F" female connector and new plastic outdoor cover for a quick and easy installation
Separate VHF/UHF amplification with selectable remote feeding on all UHF inputs.
Power suplly precence LED
Fully RED compliant

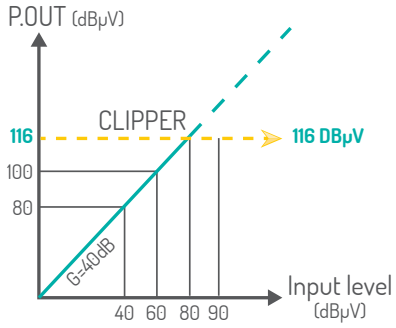
- Clipper technology inside
- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Supply voltage 12 or 24Vdc
- Available in LTE 700 or 790MHz

Item	Code	IN	Bands	Out. Lev. (dBµV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)
MAP2r3+U LTE	223703	1	III+DAB + UHF	112, 116	20, 25	15, 15	5, 4	80@12Vdc
MAP4r3+U LTE+ •	223701	1	III+DAB + UHF	112, 116	22, 42	15, 15	6, 4	125@12Vdc
MAP4rU LTE+ •	223702	1	UHF	112, 116	42	15	3	100@12Vdc
MAP4rU LTE700+ •	223704	1	UHF	112, 116	42	15	3	100@24Vdc
MAP3r3U LTE	223707	2	III+DAB , UHF	112, 116	21, 28	15, 15	5, 4	80@12Vdc
MAP3r3+UU LTE	223708	2	III+DAB + UHF, UHF	112, 116	28, 28	15, 15	7, 7	60@12Vdc
MAP3rFM+3U 700	223711	2	FM+III+DAB , UHF	112, 116	22, 28	15, 15	5, 4	85@24Vdc
MAP4r3U LTE+ •	223706	2	III+DAB , UHF	112, 116	22, 42	15, 15	5, 3	125@12Vdc
MAP3r3UU LTE	223709	3	III+DAB , UHF , UHF	112, 116	21, 28, 28	15, 15, 15	6, 7	105@12Vdc
MAP4r3UU LTE+ •	223710	3	III+DAB , UHF , UHF	112, 116	22, 40, 40	15, 15, 15	5, 7	125@12Vdc
MAP3r3UU 2LTE	223712	3	III+DAB , UHF , UHF	112, 116	26, 28, 28	15, 15, 15	5, 7	140@12Vdc
MAP3rFM+3UU 2LTE	223713	3	FM+III+DAB , UHF, UHF	112, 116	26, 28, 28	15, 15, 15	5, 7	140@12Vdc
MAP2r345U LTE	223714	4	III+DAB , IV , V , UHF	112, 116	21, 25, 25, 25	15, 15, 15, 15	5, 7	80@12Vdc
MAP2r345U LTE/.	223715	4	III+DAB , IV , V , UHF	112, 116	21, 25, 25, 25	15, 15, 15, 15	5, 7	80@12Vdc
MAP2rFM3USAT	223716	4 DiSEqC passthrough	FM , III+DAB , UHF, SAT	112, 116	22, 20, 25, -1	15, 15, 15, -	6, 6, 6, -	80

• CLIPPER Technology

CLIPPER Technology •

Automatic circuit (made by FRACARRO) which limits the gain of the UHF input in order to **guarantee the maximum RF output level** and at the same time **minimising the intermodulation**. (RED compliant)



The European directives

Each model complies to the Radio Spectrum and the Electromagnetic Compatibility and Safety indicated in recent European directives. **201453/UE, 2011/65/UE. RED compliant**.

Electronic Mast and indoor eequipment

Mast amplifier

MAP106

MAP540LTE

MAP 12V series

No serve

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Supply 12 V

Item	Code	IN	Bands	Out. Lev. (dBµV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
MAP106	223122	1	VHF + UHF	115	34, 34	15, 15	5, 5	75	10
MAP113LTE	223513	1	UHF	115	30	15	8	80	10
MAP115LTE	223523	1	III+DAB + UHF	115	30, 30	15, 15	5, 5	75	10
MAP204LTE	223519	2	III+DAB , UHF	115	25, 24	15, 15	5, 5	65	10
MAP206LTE	223520	2	III+DAB , UHF	115	35, 35	15, 15	5, 5	75	10
MAP207LTE	223524	2	III+DAB + UHF , UHF	115	30, 30	15, 15	8, 8	70	10
MAP208	223161	2	III+DAB , UHF	115	34, 35	15, 15	4, 3	80	10
MAP210/31-33	223127	2	VHF+IV , V	112	-2, 11	-	-, 5	40	10
MAP303/31-33	223128	3	VHF , IV , V	115	-2, 12	-	-, 5	40	10
MAP313LTE	223511	3	III+DAB , UHF , UHF	115	24, 30, 30	15, 15, 15	5, 8	80	5
MAP315LTE	223522	3	III+DAB , UHF , UHF	115	30, 38, 38	15, 15, 15	5, 8	95	5
MAP400	223141	4	VHF , VHF , UHF , UHF	112, 115	-4, 21, 19, 19	-, 15, 15, 15	-, 5, 8	60	5
MAP401	223195	4 DiSEqC passthrough	FM , III+DAB , UHF , SAT	112, 115	21, 19, 30, -2	15, 15, 15, -	5, 6, -	85	5
MAP413LTE	223510	4 (2 outputs)	FM , III+DAB , UHF , UHF	115	24, 24, 30, 30	15, 15, 15, 15	5, 8	75	10
MAP540LTE	223508	4	III+DAB , IV , V , UHF	115	15, 10, 10, 10	-	4, 8	40	5
MAP540LTE/..	223514	4	III+DAB , IV , V , UHF	115	15, 10, 10, 10	-	4, 8	40	5
MAP541LTE	223509	4	III+DAB , IV , V , UHF	115	24, 19, 20, 20	15, 15, 15, 15	4, 8	60	5
MAP541LTE/..	223515	4	III+DAB , IV , V , UHF	115	24, 19, 20, 20	15, 15, 15, 15	4, 8	60	5
MAP541LTE/40-42	223525	4	III+DAB , IV , V , UHF	115	24, 19, 20, 20	15, 15, 15, 15	4, 8	60	5

Mast amplifier

MAP106

MAP 24V Series

MAP mast amplifiers mix and amplify signals coming from different aerials. Metal frame chassis fullishielded with F connectors.**Quick and easy installation**. Remote feeding on each input.

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Supply 24Vdc

Item	Code	IN	Bands	Out. Lev. (dBµV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
MAP110	223196	1	III+DAB + UHF	115	13	-	2.5, 2.5	30	10
MAP111	223506	1	UHF	115	13	-	2.5	30	10
MAP116I	223507	1	UHF	115	27	15	2.5	60	10
MAP102	223121	1	UHF	115	33	15	6	70	10
MAP113LTE24	223516	1	UHF	115	30	15	5	70	10
MAP113LTE700	223527	1	UHF	115	30	15	5	70	10
MAP201LTE	223512	2	VHF , UHF	115	24, 34	15, 15	5, 5	80	10
MAP201LTE700	223526	2	VHF , UHF	115	24, 34	15, 15	5, 5	80	10
MAP300LTE	223521	3	III+DAB , UHF , UHF	115	34, 40, 40	15, 15, 15	5, 8	95	10

Mast amplifier

MAK2510LTE

MAK Series

MAK mast amplifier mixes and amplify signals coming from different aerials. Metal frame chassis fullishielded with F connectors.**Quick and easy installation**. Remote feeding on each input.

- Separate amplification between VHF and UHF
- Selectable remote feeding on all inputs (100mA max)
- Supply 12V. Gain adj. on all inputs
- Mast strap up to 60mm Ø
- Working temperature from -10 to 55°C.
- (*) special tuning

Item	Code	IN	Bands	Out. Lev. (dBµV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
MAK2510LTE	223387	1	III + DAB + IV + V	115, 118	21, 25, 25	20, 20, 20	4, 8	105	1
MAK2331LTE	223389	3	III+DAB , UHF , UHF	115, 118	21, 23, 23	20, 20, 20	4, 8	85	1
MAK2340LTE	223393	4	III+DAB , IV , V , UHF	115, 118	19, 22, 22, 22	20, 20, 20, 20	4, 8	85	1
MAK2340LTE/..*	223390	4	III+DAB , IV , V , UHF	115, 118	19, 22, 22, 22	20, 20, 20, 20	4, 8	85	1
MAK2340LTE/40-42	223388	4	III+DAB , IV , V , UHF	115, 118	19, 22, 22, 22	20, 20, 20, 20	4, 8	85	1
MAK2640LTE	223392	4	III+DAB , IV , V , UHF	115, 120	30, 30, 30, 30	20, 20, 20, 20	4, 8	175	1
MAK2640LTE/..*	223391	4	III+DAB , IV , V , UHF	115, 120	30, 30, 30, 30	20, 20, 20, 20	4, 8	175	1

Electronic Mast and indoor eequipment

Line Amplifiers

AT Series

Indoor/outdoor wide band line amplifier 174-790MHz, gain 14dB, developed to be used as pre amplifier with remote supply from the output

- Built in LTE filter
- IP66 outdoor mounting
- 12Vdc

AT14LTE59

Item	Code	IN	Input bands	Gain (dB)	Out. Lev. (dBµV)	Noise figure dB	Current cons. (mA)	Pack. Pcs
AT14LTE59	226712	1	VHF + UHF	14	115	2	30	1
AT14LTE60	226713	1	VHF + UHF	14	115	2	30	1

POWER SUPPLY UNIT

PSU and MINI POWER series

High efficiency switching power supply unit, low consumption, fully shielded.

MINIPOWER12P

MINIPOWER12

PSU412

Item	Code	Outputs	Voltage Mains (Vac,Hz)	Max. current (mA)	Bands MHz	Plug	Insertion loss (dB)	Pack. Pcs	Dimen-sions mm
MINIPOWER12P	270020	1	12	200	5-862	B type	0.5	1	42 x 56 x 38
MINIPOWER12	270021	1	12	200	5-862	Clamp	0.5	1	42 x 56 x 38
PSU412	289562	2	12	200	5-862	B type	4	1	92x49x109
MINIPOWER24P	270023	1	24	130	5-862	B type	0.5	1	42x56x38
MINIPOWER24	270024	1	24	130	5-862	Clamp	0.5	1	42x56x38
PSU342	289564	2	24	100	5-862	B type	4	1	92x49x109
PSU511	289851	1	12	200	5-2400	B type	2	1	92x49x109

POWER SUPPLY UNIT

AM50N

AM Series

AM series power supply unit to cover several needs, from 50 to 100mA, clamp coaxial connector

- Out voltage 12Vdc
- Working temperature from -10 to 55°C.
- Clamp Connectors
- Isolation Class II
- Mains 220-230Vac 50-60Hz.
- Dimensions 50x87x46 mm.

Item	Code	Outputs	Voltage Mains (Vac,Hz)	Max. current (mA)	Bands (MHz)	Insertion loss (dB)	Connector	Pack. Pcs
AM50N	289112	1	12	50	5-862	0.2	Clamp	20
AM100N	289113	1	12	100	5-862	0.2	Clamp	20
AM102N	289119	2	12	100	5-862	4	Clamp	20

Inddor Amplifier

AFI121T

AFI series

Indoor amplifier with built in power supply and F connector to amplify and distribute DVB/T-T2 and DVB/S-S2 signals on residentail buidings, houses or flats.

- Switching power supply, low power consumption
- Built in screwdriver to adjust gain and slope
- Under cover adjustment
- Hidden wall mout screws
- Green led - power on
- Mains 220-230Vac 50-60Hz.
- Isolation Class II
- Working temperature from -10 to 55°C.

Item	Code	IN	Bands	Outputs	Out. Lev. (dBµV)	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Pack. Pcs
AFI121T	223231	1	VHF , UHF	2	111	15, 15	-	4, 4	1
AFI112T	223230	1	VHF , UHF	1	115	20, 20	15, 15	4, 4	1
AFI122T	223233	1+ return path	VHF , UHF , UHF 2	2	115	10, 20, 20	15, 15, 15	5.5, 5.5, 5.5	1
AFI313T	223236	3 separatge adj.	FM , III+DAB , UHF	1	117	24, 24, 24	15, 15, 15	4.5, 4.5, 4.5	1
AFI123T	223235	1	VHF , UHF	2	113	30, 30	15, 15	4.5, 4.5	1
AFI123W	223237	1	VHF , UHF , SAT	1	117	20, 20	20, 20	5.5, 5.5, 6.5	1
AFI112LTE700AUS	223240	1	VHF , UHF	1	115	20, 20	15, 15	4, 4	1

Electronic Mast and indoor eequipment

Inddor Amplifier

MINIBOOST Series

Wide band aamplifier
High efficiency in small dimensions
Fully shielded
F type connector

- Green led - power on
- Mains 220-230Vac Isolation class II.
- Operatinf temperature 0 ÷ 45°C.

MINIBOOST

Item	Code	IN	Bands	Gain (dB)	Noise figure (dB)	Mains (Vac, Hz)	Out. Lev. (dBµV)	Pack. Pcs
MINIBOOST	270025	1	III+DAB , UHF	12, 12	4, 4	220-230, 50/60	115	1

Indoor Modulator

Digital modulator Series

High quality digital indoor DVB-T modulator, HDMI input or baseband stereo input.
High resolution up to Full HD 1920*1080-30fps, high quality output signals MER-35dB designerd to modulate and distribute an HD source or analog source (i.e. Audio/ Video Player, computer, TVCC cameras) in a domestic system.

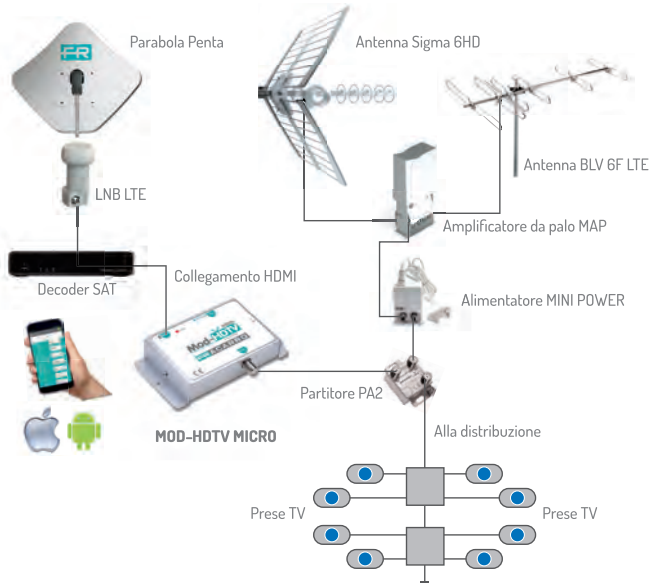
- Video coding HD (MPEG-4 AVC/H.264)
- High resolution (fino a 1920x1080-30fps)
- High bitrate (up to 19Mb/s)
- MER 35dB on UHF channels
- Quick and easy installation thanks to 7 segment display and keys on the front pannel.

MOD-HDTV

MOD-HDTV MINI

MOD-HDTV MICRO

Installation example



Indoor Modulator

MOD-HDTV

MOD-HDTV MINI

MOD-HDTV MICRO

Item		MOD-HDTV	MOD-HDTV MINI	MOD-HDTV MICRO
Code		287400	287406	287429
Input no.		2	1	1
Output no.		1	1	1
Connectors		2 x F Female(RF), 3xRCA (analog.IN), 1xHDMI (digital IN), 1x USB	1 x F Female (RF), 1xHDMI (digital IN), 1x USB	1 x F Female (RF), 1xHDMI (digital IN), 1x Bluetooth
Input				
Input 1		HDMI	HDMI	HDMI
Input 2		CVBS	-	-
Video Codeing		MPEG-4 AVC / H.264	MPEG-4 AVC / H.264	MPEG-4 AVC / H.264
Bitrate Video	Mbps	1-19	1-19	1-19
Video profile		High profile 4.0	High profile 4.0	High profile 4.0
Video resolution		1920x1080@30fps HDMI 720x576@25fps	1920x1080@30fps HDMI 720x576@25fps	1920x1080@30fps HDMI 720x576@25fps
Audio type		HDMI & mono/stereo	HDMI	HDMI
Audio Standard		MPEG-1 Layer II	MPEG-1 Layer II, AAC, AC3	MPEG-1 Layer II, AAC, AC3
Bitrate Audio	Kbps	64, 96, 128, 256, 320, 384	64, 96, 128, 192, 256, 320, 384	64, 96, 128, 192, 256, 320, 384
Audio level	Vpp	0.5 (adjustable)	0.5 - 1 (adjustable)	0.5 - 1 (adjustable)
Output				
Trasponder No.		1	1	1
Modulation		DVB-T (EM300744)	DVB-T (EM300744)	DVB-T (EM300744)
Costellation		QPSK, 16QAM, 64QAM	QPSK, 16QAM, 64QAM	QPSK, 16QAM, 64QAM
Channels		E5-E12, E21-E69	E5-E12, E21-E69	E21-E69
Bands	MHz	174-230, 470-762	174-230, 470-862	174-230, 470-862
Freq. step	MHz	1	1	1
Freq. band	MHz	6, 7, 8	6, 7, 8	6, 7, 8
Carriers		2K, 8K	2K, 8K	2K, 8K
Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32
FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8
Max out ùlevel	dBuV	90	90	90
Level adj.	dB	20	20	20
MER	dB	35@UHF	35@UHF	35@UHF
MIX band	MHz	47-862	47-862	47-862
insertion loss	dB	1	1	1
other features				
Configurable parameters		Service name. service ID, video PID, audio PID, PMT PID, TS ID, ONID, networkID, provider name	Service name. service ID, video PID, audio PID, PMT PID, TS ID, ONID, networkID, provider name	Service name. service ID, video PID, audio PID, PMT PID, TS ID, ONID, networkID, provider name
LCN		yes (nordig, ITC/UK, EICTA/Europa, Nuova zelanda)	yes (nordig, ITC/UK, EICTA/Europa, Nuova zelanda)	yes (nordig, ITC/UK, EICTA/Europa, Nuova zelanda)
Supply voltage	V, mA	12, 400max	12, 340max	12, 290max
Operating temperature		from 0 to 50°	from 0 to 50°	from 0 to 50°
Dimensions		200 x 102 x 41	200 x 102 x 41	131 x 81 x 27

Electronic Mast and indoor eequipment

Indoor Modulator

MOD90

Analog modulator Series

Fullband indoor analogue modulator, double side band. easy set up thanks to the dip switch and the built in display. PLL syntesis assure a stable frequency set up. Modulator can be remotely feeded from theoutput connecto or locally with an external power supply. Packing 1 pc.

- Designed to distribute signals coming from STB without a built in modulator.
- Audio and video level adj.
- Multistandard

			MOD90	MOD90R
Code			280001	280002
Composite video input	Frequency range	MHz	20-6000	20-6000
	Input Level	Vpp	0.5-1.5	0.5-1.5
	Impedance	Ohm	75	75
Audio input	Frequency range	MHz	40-15000 (SCART)	40-15000 (RCA)
	Input Level	mVpp	0.2-3	0.2-3
	Impedance	OKhm	10	10
	Level Adj.	dB	Trimmer Adj.	Trimmer Adj.
RF Output	Output Level	dBµV	90	90
	Out.Lev. adj	dB	0-20 with trimmer	0-20 with trimmer
	Available standard		Multi-standard, PAL, B/G, I, D/K, SECAM, L, H	Multi-standard, PAL, B/G, I, D/K, SECAM, L, H
	Output ferq. range	MHz	47-862	47-862
Audio	n°1	MHz	5.5, 6.0, 6.5	5.5, 6.0, 6.5
Fine frequncy video adj.		MHz	±2.25 step 0.25 (programmable)	±2.25 step 0.25 (programmable)
Carrier ratio	Audio1/video	dB	12-16	12-16
	Audio2/video	dB	21±3	21±3
Modulation with		%	100	100
S/N ratio		dB	×57	×57
Spurious reaction			54	54
Main features				
Consumption		mA	100	100
Supply voltage		V	9/24	9/24
Conformity			EN 50083-2	EN 50083-2
Test Signal			Black screen with white stripes (dip8)	Black screen with white stripes (dip8)
operating temperature		C°	-10 a +55	-10 a +55
DC passthrough			F tyoe connector	F tyoe connector
Dimensions		mm	100 x 75 x 30	80 x 75 x 30

Indoor Modulator

MOD90S

Analog modulator S Series

double side band Stereo Audio/Video modulator, stabilized PLL output frequency.
VHF or UHF frequency output with multistandard modulation allow the installation on several systems..

			MOD90S
Code			287058
Composite video input	Frequency range	Hz-MHz	20-6
	Input Level	Vpp	0.9-11
	Impedance	Ohm	75
Audio input	Frequency range	MHz	20-15000
	Input Level	mVpp	775
	Impedance	OKhm	10
	Freq. deviation	KHz	±50
	Level Adj.	dB	±6
RF Output	Output Level	dBµV	90
	Out lev. adj.	dB	0-20
	Available standard		R/G, D/K, H, I, SECAM, L, M/N
	Output ferq. range	MHz	47-68, 170-300, 470-862
Audio	n°1	MHz	4.5, 5.5, 6.0, 6.5
	2	MHz	5.742
Fine frequncy video adj.		MHz	±2.25 step 0.25 (programmable)
Carrier ratio	Audio1/video	dB	12-16
	Audio2/video	dB	21±3
Modulation with		%	81
S/N ratio		dB	›55
Spurious reaction			-
Main features			
Consumption		W	2.5
Supply voltage		Vac,Hz	230, 50
Conformity			EN 50083-2
Test Signal			Black screen with white stripes
operating temperature		C°	- 10 to +40°
Remote feeding		mA	-
Dimensions		mm	133 x 73 x 39

Electronic Mast and indoor eequipment

Channel precessor

MCP/UU

Channel processor series

Channel processor to frequency convert analog or digital channel, from any frequency on UHF band to any other. Input and output frequencies can be selected through the built in dip switches. Saw technology allows the ceonversion also on adiacent channes; the product can be used also as a filter with ISO frequency conversion. 20dB gain adjustment.

- Double conversion to reduce any spourious signal
- Saw filtering
- High input dynamics
- Input mix to add channels from other directions
- ICP/UU indoor use and MCP/UU outdoor ude

			ICP/UU	MCP/UU
Code			223367	223366
Inputs		No.	2	2
	n°1		1ch-UHF	1ch-UHF
	2		III+S+UHF	III+S+UHF
Outputs		No.	1	1
	n°1		III+S+UHF+1ch	III+S+UHF+1ch
IN 1 Conversion				
Channels		No.	21-69	21-69
Channel selection			Dip-switch	Dip-switch
Freq. step		MHz	8	8
Gain		dB	15	15
Gain adj.		dB	20	20
Phase noise		dBc/Hz	80@10KHz	80@10KHz
Max out Lev.		dBµV	90 (IM3-54dBc 2 toni)	90 (IM3-54dBc 2 toni)
Max out lev. DTT		dBµV	97 (IM3-35dBc 2 toni)	97 (IM3-35dBc 2 toni)
Max input lev.		dBµV	90	90
In 2 MIX				
Freq. band		MHz	47-862	47-862
insertion loss		dB	-4	-4
Main features				
Consumption		W/mA	5	170
Supply voltage		Vac,Hz/Vdc	220-240, 50-60	12
operating temperature		C°	-5 to +55	-5 to +55
Dimensions		mm	127 x 58 x 128	127 x 58 x 129

Multiband amplifier

J31B

J series

Push-Pull line amplifier with really high band flatness, fully shielded with F connectors.

- EN 60065 e EN 50083-2 conformity .
- Working temperature from -10 to 55°C.
- Mains 220-230Vac 50-60Hz.

Item	Code	IN	Bands	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Out. Lev. (dBµV)
J21B	223023	1	III+DAB , UHF	21	15	10	117
J31B	223024	1	III+DAB , UHF	31	15	10	117

Multiband amplifier

MBJ3r345U LTE

MBJ EVO Series

Indoor multi input amplifier to mix and amplify signals coming from different aerials
The innovative A.B.L.A. (Automatic Building Level Adjustment) function is able to keep stable the set up thought a trimmer output level.

- **A.B.L.A. Technology**
- Separate amplification VHF/UHF
- High shielding
- ABS (V0 class) chassis
- -60% volume
- DIN rail clamp
- Switching power supply (>80% efficiency)
- Mains 220-230Vac Isolation class II.
- Shirt circuit protection
- operating temperature -10 to +55°C
- (*) special tuning

Item	Code	IN	Bands	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Out. Lev. (dBµV)
MBJ2r3+4+5 LTE	223609	1	III+DAB , IV , V	25, 25, 25	20, 20, 20	6, 9, 9	110, 115
MBJ3r3+4+5 LTE	223608	1	III+DAB , IV , V	35, 35, 35	20, 20, 20	6, 6. 6	110, 120
MBJ3r3U LTE	223607	2	III+DAB , UHF	35, 35	20, 20	6, 6	110, 120
MBJ2r3UU LTE	223606	3	III+DAB , UHF , UHF	20, 20, 20	20, 20, 20	6, 9, 9	110, 115
MBJ2rFM+3UU LTE	223611	3	FM+III+DAB , UHF , UHF	20, 20, 20, 20	20, 20, 20, 20	6, 6, 9, 9	110, 115
MBJ3r3UU LTE	223605	3	III+DAB , UHF , UHF	32, 32, 32	20, 20, 20	6, 9, 9	110, 120
MBJ3rFM+3UU LTE	223610	3	FM+III+DAB , UHF , UHF	32, 32, 32, 32	20, 20, 20, 20	6, 6, 9, 9	110, 120
MBJ2r345U LTE	223603	4	III+DAB , IV , V , UHF	20, 20, 20, 20	20, 20, 20, 20	6, 9, 9, 9	110, 115
MBJ2r345U LTE/..*	223604	4	III+DAB , IV , V , UHF ,..	20, 20, 20, 20	20, 20, 20, 20	6, 9, 9, 9	110, 115
MBJ3r345U LTE	223601	4	III+DAB , IV , V , UHF	35, 35, 35, 35	20, 20, 20, 20	6, 9, 9, 9	110, 120
MBJ3r345U LTE/..*	223602	4	III+DAB , IV , V , UHF ,..	35, 35, 35, 35	20, 20, 20, 20	6, 9, 9, 9	110, 120

A.B.L.A. Technology

A.B.L.A. Technology
Automatic Building Level Adjustment

A.B.L.A. Technology: FRACARRO's exclusive system for maintain the constant RF output level, set by the dedicated trimmer, even if the RF input level of each input changes (A.B.L.A. indipendents circuits).

Electronic Mast and indoor eequipment

Multiband amplifier

MBX Series

Multiband amplifier to amplify and mix signals coming from different aerials.
Zinc alloy die cast housing fully shielded
Separate amplification between VHF and UHF up to 125dBuV with push pull amplification
High gain and high output level to be used on building and residential system.

- HIgh output level up to 130dBuV
- Test output -30dB
- Gain adj. under the metal cover
- Switching power supply (>80% efficiency)
- Remote feeding on all inputs, 100mA
- Mains 220-230Vac Isolation class II.
- operating temperature -10 to +55°C
- (*) special tuning

MBX5540LTE

Item	Code	IN	Bands	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Out. Lev. (dBµV)
MBX5540LTE	235109	4	III+DAB , IV , V , UHF	31, 30, 30, 30	20, 20, 20, 20	4.5, 8.5, 8.5, 8.5	122, 125
MBX5540LTE/..*	235113	4	III+DAB , IV , V , UHF	31, 30, 30, 30	20, 20, 20, 20	4.5, 8.5, 8.5, 8.5	122, 125
MBX5541LTE	235111	4	FM , III+DAB , UHF , UHF	31, 30, 30, 30	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5710	235025	1	VHF , UHF	43, 43	20, 20	4.5, 6	122, 125
MBX5720	235021	2	VHF , UHF	43, 43	20, 20	4,5, 6	122, 125
MBX5740LTE	235108	4	III+DAB , IV , V , UHF	38, 43, 43, 43	20, 20, 20, 20	4.5, 7.5, 7.5, 7.5	122, 125
MBX5740LTE/..*	235112	4	III+DAB , IV , V , UHF	38, 43, 43, 43	20, 20, 20, 20	4.5, 7.5, 7.5, 7.5	122, 125
MBX5741LTE700	235115	4	FM , III+DAB , UHF , UHF	35, 38, 43, 43	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5741LTEUK	235114	4	FM , III+DAB , UHF , UHF	35, 38, 43, 43	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5741LTE	235110	4	FM , III+DAB , UHF , UHF	35, 38, 43, 43	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5851	235016	5	FM , III+DAB , UHF , UHF	34, 34, 44, 44	20, 20, 20, 20	5, 5, 8.5, 8.5	122, 125
MBX7740/35-36	235105	4	III+DAB , IV , V , UHF	40, 40, 40, 40	20, 20, 20, 20	11, 11, 11, 11	130, 130
MBX7741	235006	4	FM , III+DAB , UHF , UHF	40, 40, 40, 40	20, 20, 20, 20	11, 11, 11, 11	130, 130

HEADEND AMPLIFIERS

AMP9764

AMP Series

Satellite amplifier with terrestial mix in to be used as sat booster for IF IF system .
Wall mount support (MBX0001) to keep space on the product back for cable pass through.

- Low RF insertion loss
- Switching power supply (>80% efficiency)
- Gain adj. under the metal cover
- Mains 220-230Vac Isolation class II.
- Working temperature from -10 to 55°C.

Item	Code	IN No.	Bands	Out Lev (dBµV)	Gain (dB)	Adjustment (dB)	Noise figure (dB)
AMP9764	235053	2	VHF / UHF / SAT	-, 125	-2, -2, 40	-, -, 20	-, -, 10
AMP9564	223371	2	RC / FM / VHF / UHF / SAT	-, 120	-2, -2, 37-43	-, -, -, 20	-, -, -, 7
AMP9762	235051	1	RC + VHF + UHF	115	25, 25	20, 20	3, 3
AMP9762B	235055	1	RC + VHF + UHF	120	40, 40	20, 20	9, 9
AMP9763	235052	1	RC + VHF + UHF + SAT	120, 125	40, 40, 40	20, 20, 20	8, 8, 10
AMP9763B	235056	1	RC + VHF + UHF + SAT	120, 125	41, 41, 41	20, 20, 20	9, 9, 10
AMP9762UK	235054	1	RC + VHF + UHF	115	25, 25	20, 20	3, 3
AMP522PL	289601	1	RC + VHF + UHF	124	30-38, 30-38	0-22, 0-22	8, 8

Electronic Mast and indoor eequipment

Programmable headends

FRPRO EVO HD

FRPRO EVO HD Sereis

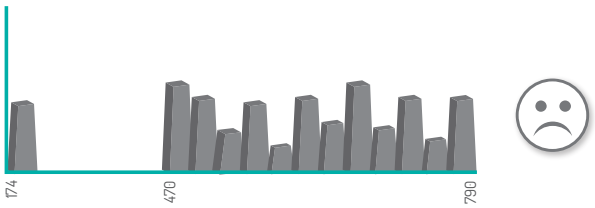
FRPRO EVO HD headends family to realize high selecivity programmable filters
FRPRO EVO HD headends are able to filter, frequency convert, amplify and distribute a large number of DVB-T2/T digital terrestrial muxes both in VHF or UHF band.

- Perfect signal equalization
- Isofrequency filtering or freq. conversion
- AGC on each mux
- Automatic LTE filtering
- Easy and quick installation

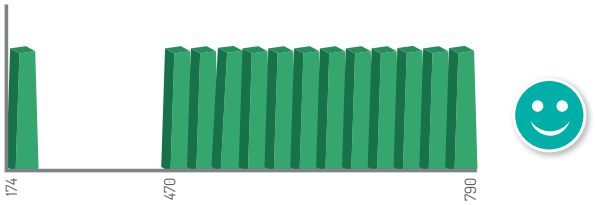
		FRPRO EVO HD
Code		287434
Inputs	No.	4
Input bands	MHz	FM , 4x VHF/UHF
Lte protection	MHz	470-862 or 470-790 or 470-694 AUTO LTE Filter
Max out. Lev	dBµV	120(60dBIM3) 113 (per 1 MUX) 110 (per 6 MUX)
Gain adj.	dB	>45 (auto AGC)
Main adj	dB	20
Slope adj	dB	Slope 9dB
Selectivity	dB	35@1MHz
MER	dB	35
Main features		
Load and save configuration		SD card
Connector		F Female
Remote voltage	V	12/24
current feedinf	mA	100
Consumption	W	16
Supply voltage	Vac,Hz	220-240, 50-60
Pcs		1
Conformity		EN60065: 2004-06, EN50083-2: 2002-05
Protection		IP20
operating temperature	C°	-5 to +50°
Dimensions	mm	217x165x59

Perfect Eaulization

Segnale in ingresso NON equalizzato



Segnale in uscita perfettamente equalizzato e amplificato



Programmable filtres

FIL 10

FIL Series

Programmable filter headend, 10 cluster, each clusteer can filter from 1 to 6 channel un all the UHF band.
10 clusters, fully programmable and all of them can be connected to any UHF input.

- Programmable through built in keybord and LCDdisplay LCD or trough PC software.
- The configuration can be loaded on the product or copied into an USB stick
- Autoalignement function to realize a flat distribution with the automatic gain setup
- Input UHF matrix fully flexible, cluster can be connected toall of them
- Compact design
- Mains 220-230Vac Isolation class II.
- Operatinf temperature 0 ÷ 45°C.

			FIL 10
Code			272108
Inputs		No.	4
Outputs		No.	1
Input bands			III+DAB / UHF / UHF 2 / UHF 3
III+DAB	Frequency	MHz	174-320
	Gain	dB	18
	Max input lev.	dBµV	100
	Max out. Lev	dBµV	90
	Gain adj.	dB	20
	Noise figure	dB	6
UHF	Frequency	MHz	470-790
	Gain	dB	18
	Gain adj.	dB	20
	Noise figure	dB	6
UHF 2	Frequency	MHz	470-790
	Gain	dB	18
	Gain adj.	dB	20
	Noise figure	dB	6
	Max input lev.	dBµV	90
	Max out. Lev	dBµV	90
	Cluster	No.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
	Remote feeding on all inputs, 100mA	V	12/24
	auto alignement	dB	20
Cluster	Selectivity	dB	20@10MHz
Cluster	Bandwidth	MHz	8-48 (1-6ch)
Return loss		dB	-
Main features			
Load and save configuration			USB 2.0 (FAT 32)
Connector			F Female
Consumption		W	25
Supply voltage		Vac,Hz	220-240

COMPACT Headend

D-MATRIX 4S

D-MATRIX 4S EVO

D-MATRIX 8T

D-MATRIX Series Trasmodulation from DVB-S2/T2/C to DVB-T

The new D-Matrix compact headend range will introduce a revolutionary concept: a unique mechanics is able to receive many satellite or digital terrestrial contents, in HD or SD standard definition, coming from different and indipendents inputs and remodulate them on "customized" RF output multiplexes. Thanks to the universal slots, the compact headend can decript the desired programs by using the proper CAM and professional smart cards.

- Fully manageable parameters for all the muxes and individual programs (LCN, SID, PDSD, NIT, ...).
- "Mux-ad-Hoc": you can create a mux with the choosen programs from up to 4 satellite transponders and manage all the descriptor parameters of each mux (ONID, TSID, NetID,...) and each program inside the mux (LCN, SID, PID, Program name..).
- **ARP 2.0: Automatic Recovery Procedure** to save the higher priority programs and guarantee Continuity of Service when bit rate overflows occurr. All the program are sequentially restored when the global bit rate returns within the limits.
- **WEB interface** based headend: setup, and configuration must be done by using web interface built-in; basic setup available by on board keyboard.
- **USB Port** to upload/download presets or for the firmware upgrade, **videoplayback** (TS file format).

			D-MATRIX 4S	D-MATRIX 4S EVO	D-MATRIX 8T
CodE			283131	283132	283133
Inputs					
	Tuners	No.	4	4	8 (2 each connector)
	Demodulation		DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-T2, DVB-T o DVB-C (selectable)
	Bands	MHz	950-2150	950-2150	110-862 (170-862 for the first coax IN)
	Channels		-	-	E5-E69
	Larghezza canali	MHz	7,8	7,8	7,8
	AFC Dynamics	MHz	±5	±5	±400 (DVB-T2/T), ±100 (DVB-C)
	Symbol rate	Msymb/sec	2-45	2-45	-
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)
	Remote feeding	mA	100 max (14V)	400 max (14V)	200 max (12V)
	LNB controls		DiSEqC 1.0	DiSEqC 1.0	-
	Carrier No.		-	-	2k, 8k
	Level	dBµV	50-80	50-80	55-85
Outputs					
	Generated channels	No.	2	4 (2 couple of adiacent mux)	8 (2 quartine of adiacent mux)
	Standard		DVB-T / DVB-C	DVB-T / DVB-C	DVB-T
	Channel range		S2-E69	S2-E69	S2-E69
	Frequency	MHz	111-862	111-862	111-862
	Freq. step	KHz	250	250	250
	Level	dBµV	100	95	95

Headend

			D-MATRIX 4S	D-MATRIX 4S EVO	D-MATRIX 8T
	Level adj.	dB	0-20	0-20	0-20
	Flatness		±1.5	±1.5	±1.5
	MER	dB	≥36	≥36	≥36
	Spurious rejection	dB	<-50	<-50	<-50
	Spectrum		Normal, inverted	Normal, inverted	Normal, inverted
	Operating mode		Normal, single carrier	Normal, single carrier	Normal, single carrier
DVB-T Modulation					
	Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM
	Channel band	MHz	6, 7, 8	6, 7, 8	6, 7, 8
	Carrier No.		2k, 8k	2k, 8k	2k
	Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8
DVB-C modulation					
	Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
	Channel band	MHz	Related to the output symbol rate	Related to the output symbol rate	Related to the output symbol rate
	FEC		Reed Solomon (204, 188)	Reed Solomon (204, 188)	Reed Solomon (204, 188)
	Symbol rate	Msymb/sec	1000-6999	1000-6999	1000-6999
Main features					
	USB		Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)
	Programming mode		Web interface,keybord and display	Web interface,keybord and display	Web interface,keybord and display
	Supply voltage	V, Hz	184-264, 50-60	184-264, 50-60	184-264, 50-60
	Consumption	W	42 (with 2 CAM)	42 (with 2 CAM)	42 (with 2 CAM)
	Common interface		2 x PCMCIA (Standard EN50221, TS10169)	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode
	Dimensions	mm	360 x 230 x 54 (without CAM) 385 x 230 x 54 (with CAM)	360 x 230 x 54 (without CAM) 385 x 230 x 54 (with CAM)	360 x 230 x 54 (without CAM) 385 x 230 x 54 (with CAM)
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	C°	-5 to +55 (without CAM)	-5 to +55 (without CAM)	-5 to +55 (without CAM)

COMPACT Headend

3DGFLEX Series Trasmodulatrion from DVB-S2/T2/C to DVB-T

The 3DGFLEX is a modular headend designed to process a range of digital signals ready to be distributed over a centralised system, such as large apartment buildings or hospitality environments, by using a combination of different twin modules it's possible to perform a remultiplexing of different contents (satellite or DTT programs, ASI sources) and distribute them on the centralized coaxial network.

- **"Smart & Pool"** trought the bidirectional Back-Panel bidirezionale ad alta velocità per lo scambio dei contenuti con i moduli nuovi inseriti nella stessa centrale (funzionalità disponibile solo per i nuovi moduli EVO)
- MUX ad Hoc agile QAM or DTT: Create a mux with the chosen programs from up to 3 different sources (two connectors and oneTS available coming from back panel) and manage all the descriptor parameters: just drag and drop the available channels into the mux.
- USB Port to upload/download pre-setted set up or for the firmware upgrade, in the new generation is also possible play .TS video
- **Auto Remapping** Function: You can change a program in real time within the mux without the need to retune all the TV sets in the system.
- Web based interface: The headend can be remotely programmed or monitored anytime or anywhere (PC and mobile). When a change is detected in the users configuration an alert e-mail is automatically sent.
- ARP 2.0: Automatic Recovery Procedure to save the higher priority programs and guarantee Continuity of Service when bit rate overflows occurr. All the program are sequentially restored when the global bit rate returns within the limits.
- FPGA technology: enables a flexible and efficient way of upgrading asystem, using the latest state of the art technology.
- Remote management included to monitor and edit the set up of the headened remotely.
- USB Port to upload/download pre-setted set up or for the firmware upgrade, in the new generation is also possible play .TS video

DVB S2

			3DG-2S2-2T	3DG-4S2-4T	3DG-4S2-BP
CodE			283157	283162	283163
Inputs					
	Tuners	No.	2	4	4
	Demodulation		DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)
	Bands	MHz	950-2150	950-2150	950-2150
	AFC Dynamics	MHz	±5	±5	±5
	Symbol rate	Msymb/sec	2-45	2-45	2-45
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Remote feeding	mA	100 max (18V)	4x125 max (14/18V)	4x125 max (14/18V)
	LNB controls		DiSEqC 1.0	DiSEqC 1.0	DiSEqC 1.0
	Level	dBµV	48-80	50-80	50-80
Back panel					
	Connectors		Back Panel 48 pin	Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Serial	Serial
	Max Bitrate	Mbit/sec	270	1000 bidirectional	1000 bidirectional

Headend

			3DG-2S2-2T	3DG-4S2-4T	3DG-4S2-BP
Outputs					
	Generated channels	No.	2	4 (2 couple of adiacent mux)	-
	Standard		DVB-T / DVB-C	DVB-T / DVB-C	-
	Channel range		S2-E69	S2-E69	-
	Frequency	MHz	111-862	111-862	-
	Freq. step	KHz	250	250	-
	Level	dBµV	102	95	-
	Level adj.	dB	0-15	0-20	-
	Flatness		±1.5	±1.5	-
	MER	dB	≥36	≥36	-
	Spurious rejection	dB	<-40	<-50	-
	Spectrum		Normal, inverted	Normal, inverted	-
	Operating mode		Normal, single carrier	Normal, single carrier	-
DVB-T Modulation					
	Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM	-
	Channel band	MHz	6, 7, 8	6, 7, 8	-
	Carrier No.		2000, 8000	2000, 8000	-
	Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32	-
	FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8	-
DVB-C modulation					
	Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	-
	Channel band	MHz	Related to the output symbol rate	Related to the output symbol rate	-
	FEC		Reed Solomon (204, 188)	Reed Solomon (204, 188)	-
	Symbol rate	Msymb/sec	1000-6999	1000-6999	-
other features					
	USB		SW upgrade	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)	SW upgrade
	Programming mode		Web interface,keybord and display	Web interface,keybord and display	Web interface,keybord and display
	Consumption	W	11 (without CAM); 13 (with 2 CAM), extraconsumo DVB-C 1.3	15 (without CAM), 20 (with CAM), extraconsumo DVB-C 1.3	7 (without CAM), 12 (with CAM)
	Dimensions	mm	245x208x54	245x208x54	245x208x54
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	C°	-10 to 50°C; -10 to 45°C (con CAM)	-10 to 50°C; -10 to 45°C (con CAM)	-10 to 50°C; -10 to 45°C (con CAM)

COMPACT HEADEND

3DGFLEX Series Trasmodulatrion from DVB-S2/T2/C to DVB-T

			3DG-2T2-2T	3DG-4T2-4T	3DG-4T2-BP
CodE			283159	283165	283166
Inputs					
	Connectors	No.	2 x F female	4 x F female	4 x F female
	Demodulation		DVB-T2, DVB-T o DVB-C (selectable)	DVB-T2, DVB-T o DVB-C (selectable)	DVB-T2, DVB-T o DVB-C (selectable)
	Bands	MHz	174-862	174-862	174-862
	Channels		E5-E69	E5-E69	E5-E69
	Larghezza canali	MHz	6,7,8	6,7,8	6,7,8
	AFC Dynamics	MHz	±400 (DVB-T2/T), ±100 (DVB-C)	±400 (DVB-T2/T), ±100 (DVB-C)	±400 (DVB-T2/T), ±100 (DVB-C)
	Symbol rate	Msymb/sec	-	-	-
	FEC		1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)	1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)	1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)
	Remote feeding	mA	2 x 100 max (12V)	2 x 100 max (12V)	2 x 100 max (12V)
	LNB controls		-	-	-
	Carrier No.		2000, 8000	2000, 8000	2000, 8000
	Level	dBµV	40-85	40-85	40-85
	Mas Bitrare ASI		-	-	-
	Common interface		2 x PCMCIA (Standard EN50221, TS10169)	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode
Back panel					
	Connectors		Back Panel 48 pin	Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Serial	Serial
	Max Bitrate	Msymb/sec	270	1000 bidirectional	1000 bidirectional
Outputs					
	Generated channels	No.	2	4 (2 couple of adiacent mux)	-
	Standard		DVB-T / DVB-C	DVB-T / DVB-C	-
	Channel range		S2-E69	S2-E69	-
	Frequency	MHz	111-862	111-862	-
	Freq. step	KHz	250	250	-
	Level	dBµV	102	95	-
	Level adj.	dB	0-15	0-20	-
	Flatness		±1.5	±1.5	-

Headend

			3DG-2T2-2T	3DG-4T2-4T	3DG-4T2-BP
	MER	dB	≥36	≥36	-
	Spurious rejection	dB	<-40	<-50	-
	Spectrum		Normal, inverted	Normal, inverted	-
	Operating mode		Normal, single carrier	Normal, single carrier	-
DVB-T Modulation					
	Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM	-
	Channel band	MHz	6, 7, 8	6, 7, 8	-
	Carrier No.		2000, 8000	2000, 8000	-
	Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32	-
	FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8	-
DVB-C modulation					
	Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	-
	Channel band	MHz	Related to the output symbol rate	Related to the output symbol rate	-
	FEC		Reed Solomon (204, 188)	Reed Solomon (204, 188)	-
	Symbol rate	Msymb/sec	1000-6999	1000-6999	-
other features					
	USB		SW upgrade	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)
	Programming mode		Web interface,keybord and display	Web interface,keybord and display	Web interface,keybord and display
	Consumption	W	11 (without CAM); 13 (with 2 CAM), extraconsumo DVB-C 1.3	5 (without CAM); 20 (with 2 CAM), extraconsumo DVB-C 1.3	7 (without CAM), 12 (with CAM)
	Dimensions	mm	245x208x54	245x208x54	245x208x54
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	C°	-10 to 50°C; -10 to 45°C (con CAM)	-10 to 50°C; -10 to 45°C (con CAM)	-10 to 50°C; -10 to 45°C (con CAM)

COMPACT HEADEND

3DG-2ASI-2T

3DGFLEX ASI Series Trasmodulation from ASI to DVB-T

ASI module is able to manage simultaneosly 2 ASI sources.
The module is able to manage ASi streams incomig from a digital encoder or from external ASI sources as broadcaster equipment choosing ina flexible way the content to realize a 2 digital muxes on output.

			3DG-2ASI-2T
CodE			283160
Max ASI bitrate			214
Back panel			
	Connectors		Back Panel 48 pin
	Type		Parallel
	Max Bitrate	Msymb/sec	270
Outputs			
	Generated channels	No.	2
	Standard		DVB-T / DVB-C
	Channel range		S2-E69
	Frequency	MHz	111-862
	Freq. step	KHz	250
	Level	dBµV	102
	Level adj.	dB	0-15
	Flatness		±1.5
	MER	dB	≥36
	Spurious rejection	dB	<-40
	Spectrum		Normal, inverted
	Operating mode		Normal, single carrier
DVB-T Modulation			
	Modulation		QPSK, 16-QAM, 64-QAM
	Channel band	MHz	6, 7, 8
	Carrier No.		2k, 8k
	Guard interval		1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8
DVB-C modulation			
	Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM
	Channel band	MHz	Related to the output symbol rate
	FEC		Reed Solomon (204, 188)
	Symbol rate	Msymb/sec	1000-6999

Headend

			3DG-2ASI-2T
Main features			
	USB		SW upgrade
	Programming mode		Web interface,keybord and display
	Consumption	W	11
	Dimensions	mm	245x208x54
	Conformity		EN50083-2, EN60065
	operating temperature	C°	-10 to 50°C

COMPACT HEADEND

3DG-BP-IP OUT

3DGFLEX IP Encoder IPTV Series

3DG-EVO IPTV multicast/unicast encoder, developed on 3DGFLEX platform to distribute IPTV signals on medium and big hospitality installations.
The item can be combined with 3DGFLEX EVO new generation receivers i.e. 3DG-4S2-BP (QUAD satellite receiver) or 3DG-4T2-BP (digital terrestrial receiver). Sharing all the information through the bidirectional high speed back-panel the solutionallow a mixed Terrestrial/Sat IP distribution..

- "Smart&Pool" technology allow the reception of the signals through the high speed Back panel.
- Up to 64 multicast IPTV (UDP, RTP/UDP) program on each module.
- Up to 1Gbit/s on each module to distribute UHD, HD, SD and radio channels on an IP network
- Built in service discovery SAP e M3U functions.
- Single programTransport Stream (SPTS) or multi program (MPTS) management
- DRM (Digital Right Management) ready

			3DG-BP-IP OUT
CodE			283164
Back panel			
	Connectors		Back Panel 48 pin
	Type		Serial
	Max Bitrate	Msymb/sec	1000 (bidirectional)
IP Output			
	Connector		IEE 802.3ab 1Gbps ethernet (10/100/1000)
	Standard		DVB-IPTV (ETSI TS102034 v1.5.1)
	Incapsulation		UDP, RTP/UDP
	Protocols		SAP, IGMP, M3U, DHCP
	Multicat group		64 (unicast or muilticast)
Main features			
	USB		SW upgrade
	Programming mode		Web interface,keybord and display
	Supply voltage	Vdc	14
	Consumption	W	5
	Dimensions	mm	245x208x54
	Conformity		EN50083-2, EN60065
	operating temperature	C°	-10 to 50°C

COMPACT HEADEND

3DG-BOX Control unit and box for 3DG Series

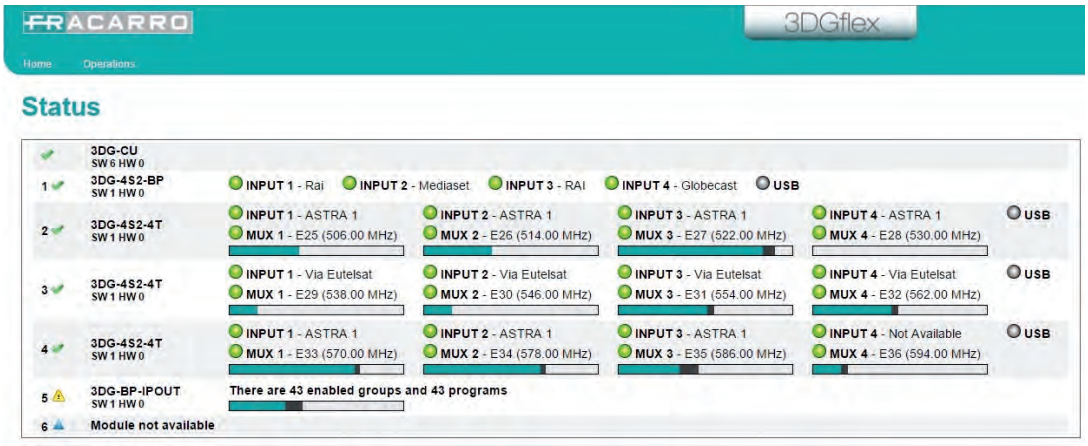
I3DG-BOX chassis has **6 available slots** to install, feed and set up all the 3DGFlex modules . The chassis contain all the needed accessories to **wall mount, ground or rack19" mounting.**

- Built in Controller host: to feed, set up and monitoring the headend in anytime from any PC.
- Built in WEB interface, display and keybord to set up all the headend.
- Remote set up to monitor or check all the headend parameter
- USB Port to upload/download presets or for the firmware upgrade, videoplayback (TS file format).

3DG-BOX 3DG-BOX-PC

		3DG-BOX
CodE		283156
Max module No.		6
RF mix input	MHz	47-862
insertion loss	dB	2.5
Main features		
Supply voltage	Vac,Hz	184-264, 50/60
Consumption	W	105 (no CAM)
Connectors		F female (RF), RJ45 (Web interface), USB (fw upgrade)
Dimensions	mm	415x260x265
operating temperature	C°	-10 - +50 (no CAM)
Conformity		EN50083-2, EN60065

Programmation web interface



Headend

COMPACT HEADEND

SIG9506

COMPACT LINE Trasmodulazione from DVB-S to Analog Series

Compact headend for the reception and distribution of 6 digital satellite
Fullband modulator (174-446MHz + 470-867MHz)
The headend can fit up to 6 QPSK receivers, 6 A/V modulators, 1 TV mixer combiner, power supply unit and keyboard+display for the set up.
A/V Outputs to connect any eventual external moculators. Built in earth bound screw.
Comply to EN500-83-2

- Quick and easy intallation
- Double side band moculator with full-band outputs (174-446MHz + 470-862MHz)
- Each single receiver can generate 14 or 18V, 22KHz tone and DiSEqC 1.0, suitable to feed an LNB or to control a multiswitch output
- Software available to set up the headend using a PC (using item KRS-RJ, not included)
- Software can be upgraded on site (using item KRS-RJ, not included)
- Heat dissipation by natural convection, no fans needed, reducing maintenance costs

			SIG9506
CodE			283126
Front-end			
	Input No.	No.	6
	Input frequency	MHz	950-2150
	Inoput Level	dBµV	45-80
	Impedance	Ohm	75
	Freq. band	MHz	36
	Freq. step	KHz	1
	insertion loss	dB	-4 - +4
	Remote feeding	V	400 (14/18V)
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0
	Demodulator		DVB-S (QPSK)
	FEC		Auto
	Symbol rate	Msymb	2 ÷ 35 (SCPC/MCPC compatible)
	AFC inteval	MHz	-2.5 - +2.5
	Decoder video		MPEG-2 main profile, main level (MP@ML)
	Decoder audio		MPEG-2 Layer I e Layer II
	Standard color		PAL/SECAM/NTSC
	Video format		16:9, pan scan, letter box
	Audio Format		Mono, languge 1, languge 2
	Teletext		-
A/V Outputs			
	Video type		Composite
	Video level	Vpp-Ohm	1-75
	Max audio level	Ohm,mVras	600-600
	Audio adj.	dB	0-10
	Frequency band	MHz	20-15000
	S/N ratio	dB	>52

			SIG9506
RF output signal			
	Frequency	MHz	VHF: 174-446 UHF: 470-862
	Channels		VHF: E5-S38 UHF: E21-E69
	Used Channels	No.	6
	Freq. step	KHz	250
	Max power	dBµV	100
	Level adj.	dB	10 (each channel)
	Trasmission Standards		PAL B/G, D/K, I, N, H, SECAM L, NTSC M
	Modulation		DSB (Double side band)
	Audio type		Stereo
	TV signals mix	MHz	47-862
	insertion loss	dB	2
	Test Signal	dB	Bleck screen with white stripes
Main features			
	Max module No.		Related to frequency and signal levels
	Supply voltage	V	220-240, 50-60
	Programming mode		Software, Keyboard
	Consumption	W	63
	Connectors		Input: 2 x F connectors (input + loop-through) for all the channels 2 x F connector (output and in MIX A/V 3 x RCA connector on each channel
	Conformity		EN50083-2, EN60065
	operating temperature	C°	-10 - +45
	Dimensions	mm	370 x 240 x 150

Headend

COMPACT Headend

SIG9708CI

DIGIFLEX Series Trasmodulation from DVB-S to DVB-T

SMATV headend for the reception and distribution of 8 digital satellite channels. Demodulates 8 digital channels and remodulates them into the RF band (47-862MHz). The front panel is removable with a lock to avoid common interface modules or cards being removed. Wall mount or 19" cabinet installation

- Easy to install, included in one box: power supply, 8 QPSK receivers with common interface slot, 8 A/V vestigial sideband modulators, wideband (47-862MHz) with audio stereo, combiner to mix 8 RF channels, final amplifier 98dBµV per channel
- Two A/V input/output connectors are available to connect external devices (DVD players, cameras, etc.)
- Master/slave setting available to share one smart card among several receivers, to decrypt several programs with only one subcription (if allowed by the pay-TV service provider).
- SIG9708CI: each receiver can generate 14 or 18V, 22KHz tone and DiSEqC 1.0, suitable to feed an LNB or control multiswitch output
- WSS signals compatible for the auto-adjustment of the TV video formats
- Heat dissipation by natural convection, no fans required, reducing maintenance costs
- Software available to set the headend using a PC

			SIG9708CI
CodE			283141
Front-end			
	Input No.	No.	8
	Input frequency	MHz	950-2150
	Inoput Level	dBµV	43-84
	Freq. band	MHz	36
	Freq. step	KHz	1
	insertion loss	dB	<4
	Remote feeding	V	400 (14/18V)
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0
	Demodulator		DVB-S (QPSK) comply to ETS 300421
	FEC		Auto
	Symbol rate	Msymb	1-45 (comply to SCPC/MCPC)
	AFC inteval	MHz	-3 - +3
	Common interface		PCMCIA (Standard EN50221, TS10169)
	Decoder video		MPEG-2 main profile, main level (MP@ML)
	Decoder audio		MPEG-2 Layer I e Layer II
	Standard color		PAL
	Video format		4:3 Adepted 16:9, pan scan, letter box, combined
	Audio Format		Stereo dual sound
	Teletext		yes
A/V Outputs			
	Video type		Composite
	Video level	Vpp-Ohm	1-75
	Max audio level	Ohm,mVras	600-600
	Audio adj.	dB	10
	Frequency band	MHz	20-15000
	S/N ratio	dB	54

			SIG9708CI
RF output signal			
	Frequency	MHz	47-862
	Channels		E2-E69
	Used Channels	No.	6
	Freq. step	KHz	250
	Max power	dBµV	98
	Level adj.	dB	0-10
	Trasmission Standards		PAL B/G Stereo
	Modulation		VSB
	Audio type		Adjustable
	TV signals mix	MHz	47-862
	insertion loss	dB	4
	Test Signal	dB	Bleck screen with white stripes
Main features			
	Max module No.		8
	Supply voltage	V	220-240, 50-60
	Programming mode		TPE (not included)
	Consumption	W	130
	Connectors		F Female
	Conformity		EN50083-2, EN60065, EN50221, ETSI TS101699
	operating temperature	C°	-10 - +45
	Dimensions	mm	430 x 305 x 200

K SERIES

K120/FM

Serie K120L Single channel amplifier

Channel amplifiers with five resonant circuit.
Excellent selectivity allows the distribution of adjacent channels.
Haigh stability temperature and good discharge resistance
Operating temperature: from -10° to +55°C.

		K120/FM	K120L/.B3	K120L/xxDT
Code		270271	270885	2708xxDT
Frequency	MHz	87.5-108	174-240	470-790
Freq. band	MHz	-	7	8
Channels		FM	E5-E12	E21-E69
Gain	dB	40	45	45
Gain adj.	dB	20	20	20
Selettività (Pa n -2)	dB	40	40	42
Selectivity (Ca n -1)	dB	5	5	10
Selectivity (Cv n +1)	dB	10	10	16
Selectivity (Cv n +2)	dB	44	44	46
Input Return Loss	dB	10	10	10
Output Return Loss	dB	10	10	10
Mix in loss	dB	0.5	0.5	0.2
Mix out loss	dB	0.5	0.5	0.2
Noise figure	dB	5	9	9
Max output level	dBµV	112	120	115
Main features				
Supply voltage	V	12	12	12
Consumption	mA	200	180	200
operating temperature	C°	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	32×129×86	32×129×86	32×129×86

K SERIES

KSTT

KS Trasmodulation from DVB-S to DVB-T Series

QPSK-COFDM trasmodulation to receive FTA channels from DVB-S satellite to create Digital MUXES in VHF or UHF band.

All in one solution to receive all programs contained in a DVB-S transponder and create a DTT mux in the VHF or UHF band.

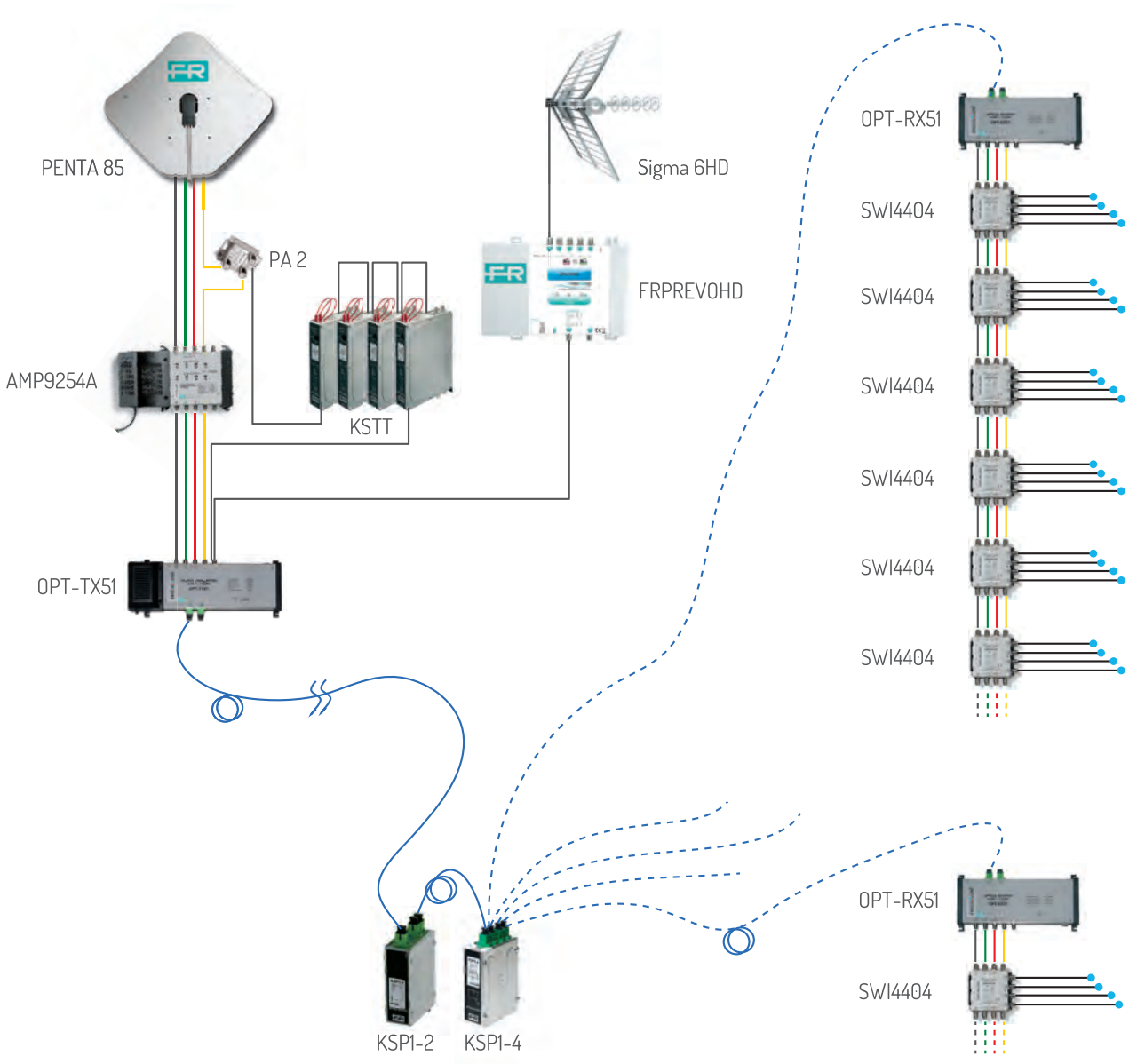
- ARP: automatic recovery procedure to protect the higher priority programs and guarantee continuity of service if bit rate overflow occurs
- Priority management of the programs included in the output multiplex
- LCN settings to adjust the channel number order in all TV sets connected to the headend
- Management and settings of all COFDM parameters
- Event data logger (from TPE or through LED) to highline when a bit-rate overflow occur o or in case of overheating.
- Low current consumption: one KP62 can feed up to 7 KSTT and one K series Amplifier

			KSTT
CodE			270641
Front-end	Input frequency	MHz	950-2150
	Inoput Level	dBµV	48-85
	Impedance	Ohm	75
	Freq. band	MHz	36
	Freq. step	KHz	1
	insertion loss	dB	1
	Remote feeding	V	400 (14/18V)
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0
	Demodulator		DVB-S (QPSK)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, auto
	Symbol rate	Msymb	2 - 40
	AFC inteval	MHz	-3 - +3
	Frequency band	MHz	47-2200
	loop through gain	dB	2.5
Output modulation	Output Multiplex	No.	1
	Trasmission Standards		DVB-T
	Freq. band	MHz	6, 7, 8
	Carriers	K	2k, 8k
	Modulation		QPSK, 16-QAM, 64-QAM
	Hierarchi		-
	Guard interval		1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8
	Symbol rate	Msymb	2000/40000
	Spectrum		Normal
RF output signal	Frequency	MHz	111-862
	Channels		S2-E69
	Freq. step	KHz	10
	Max power	dBµV	85
	Level adj.	dB	0-15
	Flatness		≤ ± 1
	DTT signal MER	dB	36
	Spurious rejection	dB	>50

Headend

		KSTT
TV signals mix	MHz	47-862
insertion loss	dB	1
Main features		
Max module No.		Related to frequency and signal levels
Supply voltage	V	12
Programming mode		TPE (not included)
Consumption	W	600 (no LNB) 1000 (with LNB)
Conformity		EN50083-2, EN60065, EN50221, ETSI TS101699
operating temperature	C°	-10 - +55
Dimensions	mm	220 x 150 x 40

Installation example



K SERIES

KDF

KD Series Trasmodulation from DVB-S to analogico

Free-to-air digital satellite receiver equipped with DSB multistandard analogue modulator to distribute signals to all TV's within the installation.
Possible to receive SCPC programs.
Automatic PID updating.

- 75 ohm impedance
- Set up though TPE (code 282733) not included.

			KDF
CodE			282646
Front-end			
	Input frequency	MHz	950-2150
	Inoput Level	dBµV	45-80
	Impedance	Ohm	75
	Freq. band	MHz	36
	Freq. step	KHz	1
	Remote feeding	mA, V	300 12
	LNB controls		0/12VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)
	Demodulator		DVB-S (QPSK) comply to ETS 300421
	FEC		Auto
	Symbol rate	Msymb	1-40
	AFC inteval	MHz	-2.5 - +2.5
	Frequency band	MHz	47-862
	loop through gain	dB	-4 - +4
	Trasmission Standards		PAL (B/G, D/K, I, N, H, M) SECAM L, NTSC M
	Modulation		DSB (Double side band)
MPEG Specs			
	Decoder video		MPEG-2 ISO-IEC 138 18-1 TS Demux
	Decoder audio		MPEG-2 Layer I e Layer II
	Standard color		PAL/SECAM/NTSC
	Video format		Adepted 16:9, pan scan, letter box
	Audio Format		Mono
	Teletext		yes
	S/N ratio	dB	>52
RF output signal			
	Frequency	MHz	VHF: 174-446 UHF: 470-862
	Freq. step	KHz	250
	Max power	dBµV	90
	Level adj.	dB	0-15
	TV signals mix	MHz	47-862
	insertion loss	dB	<1.5
	Test Signal	dB	Bleck screen with white stripes
Main features			
	Supply voltage	V	12
	Consumption	W	500 (NO LNB),850 (withLNB)
	Conformity		EN50083-2
	operating temperature	C°	-10 ÷ +55
	Dimensions	mm	180 x 105 x 62

Headend

K SERIES

KDSR

KDS Series Trasmodulation from DVB-S to analog.

Digital processors for the reception of free-to-air satellite programs transmitted with QPSK modulation.
The fullband modulator covers the whole 47-862MHz band allowing the distribution of adjacent channels. Ideal for use in condominium and hotel headends where it is necessary to distribute the signal to a high number of sockets.

- Fyull band moculator 47-862MHz
- LNB power supply, 14/18V 0/22KHz, DiSEqC 1.0
- easy to upgrade thanks to KRS-RJ interface (
- RCA connectors with audio/video signal available on all versions
- WSS signals compatible for the auto-adjustment of TV video formats
- Subtitle and teletext management

			KDSR	KDSR-S	KDSR-M
CodE			270624	270623	270622
Front-end					
	Input frequency	MHz	950-2150	950-2150	950-2150
	Inoput Level	dBµV	43-84	43-84	43-84
	Impedance	Ohm	75	75	75
	Freq. band	MHz	36	36	36
	Freq. step	KHz	1	1	1
	Remote feeding	mA, V	200 14; 100 18	200 14; 100 18	200 14; 100 18
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0	0/14/18VDC, 0/22KHz, DiSEqC 1.0	0/14/18VDC, 0/22KHz, DiSEqC 1.0
	Demodulator		Comply to ETS 300421	Comply to ETS 300421	Comply to ETS 300421
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, auto	1/2, 2/3, 3/4, 5/6, 7/8, auto	1/2, 2/3, 3/4, 5/6, 7/8, auto
	Symbol rate	Msymb	1-40	1-40	1-40
	AFC inteval	MHz	±3	±3	±3
	Frequency band	MHz	47-862	47-862	47-862
	loop through gain	dB	-4 - +6	-4 - +6	-4 - +6
	Trasmission Standards		PAL B/G	PAL B/G	PAL, D/K, I, N, H, SECAM L, NTSC M
	Modulation		VSB mono	VSB stereo	VSB Mono multistandard
MPEG Specs					
	Decoder video		MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL	PAL	PAL/SECAM/NTSC
	Video format		Adepted 16:9, pan scan, letter box	Adepted 16:9, pan scan, letter box	Adepted 16:9, pan scan, letter box
	Audio Format		Mono, languge 1, languge 2	Mono stereo dual sound	Mono, languge 1, languge 2
	Teletext		yes	yes	yes
A/V Output					
	Video type		Composite	Composite	Composite
	Video output level	Vpp - Ohm	1-75	1-75	1-75
	Max audio level	Kohm-Vrms	0-10	0-10	0-10
	Audio adj.	dB	yes	yes	yes
	frequency band	MHz	20-15000	20-15000	20-15000
	S/N ratio	dB	×57	×57	×57

			KDSR	KDSR-S	KDSR-M
RF output signal					
	Frequency	MHz	47-862	47-862	47-862
	Channels		S2-E69	S2-E69	S2-E69
	Freq. step	KHz	250	250	250
	Max power	dBµV	90	90	90
	Level adj.	dB	0-10 via TPE	0-10 via TPE	0-10 via TPE
	Audio type		Mono	Mono, stereo	Mono, multistandard
	TV signals mix	MHz	47-862	47-862	47-862
	insertion loss	dB	<1.5	<1.5	<1.5
	Test Signal	dB	Black screen with white stripes and audio	Black screen with white stripes and audio	Black screen with white stripes and audio
Main features					
	Max module No.		Related to frequency and signal levels	Related to frequency and signal levels	Related to frequency and signal levels
	Supply voltage	V	12	12	12
	Programming mode		TPE (not included)	TPE (not included)	TPE (not included)
	Consumption	W	1010(with LNB) 730 (No LNB)	1060(with LNB) 780(No LNB)	1010(with LNB) 730 (No LNB)
	Conformity		EN50083-2	EN50083-2	EN50083-2
	operating temperature	C°	-10 ÷ +45	-10 ÷ +45	-10 ÷ +45
	Dimensions	mm	155 x 40 x 220	155 x 40 x 220	155 x 40 x 220

Headend

K SERIES

KMS

KM Series Anlog VSB Modulator

A/V VSB modulators, allow the distribution of adjacent channels on the whole band from 47 to 862MHz, S band included.

Three versions are available PAL mono, PAL Stereo, Multistandard

- High output C/N
- Audio and video input level adj.

			KMTW	KMS	KMM
Code			270633	270631	270632
Input No.		No.	2	1	1
CVideo Input	Impedance	Ohm	75	75	75
	Level adj.	Vpp	1 (0.7-1.2)	1 (0.7-1.2)	1 (0.7-1.2)
	Impedance	Ohm	10	10	10
	Level adj.	Vpp	0.5 (0.5-2.5)	0.5 (0.5-2.5)	0.5 (0.5-2.5)
Standard			PAL B/G mono	PAL B/G Stereo	Multistandard N, H, D, K, I, L
Audio carrier frequency	B/G mono	MHz	5.5	-	-
	B/G stereo	MHz	-	-	-
	Left carrier	MHz	-	5.5	-
	Right carrier	MHz	-	5.74	-
	L	MHz	-	-	6.5
	H	MHz	-	-	6.5
	D	MHz	-	-	6.5
	K	MHz	-	-	-
	I	MHz	-	-	6
	N	MHz	-	-	4.5
Audio/video carrier ratio	N	dB	-	-	10
	H	dB	-	-	14
	I	dB	-	-	14
	D/K	dB	-	-	13
	L	dB	-	-	8
	B/G mono	dB	14	-	-
	B/G stereo	dB	-	14 (Left carrier) 21 (right carrier)	-
Modulation 1KHz, 0.5Vrms on audio input	B/G	KHz	49	49	-
	N (FM)	KHz	-	-	<42
	H	KHz	-	-	44
	I, D/K (FM)	KHz	-	-	>47
	L (AM)	KHz	-	-	80%
Modulation width with 1Vpp on video input	D/K, I, B/G	%	80%	80%	80%
	L	%	-	-	90-97%

			KMTW	KMS	KMM
RF output signal	Frequency	MHz	47-862	47-862	47-862
	Channels		S2-E69	E2-E69	E2-E69
	Set up	MHz	250	250	250
	Trasmission Standards		B/G Europe, L France, B Australia	B/G Europe, L France, B Australia	B/G Europe, L France, B Australia
	Created Channels		2	1	1
	Max input level	dBµV	90	90	90
	Level adj.	dB	0-15	0-15	0-15
	insertion loss	dB	<1.5	<1.5	<1.5
	Return loss	dB	-	-	-
	Spurious rejection	dB	<-57	57	57
	S/N ratio	dB	-	-	-
	Channel C/N	dB	>57	>57	>57
	C/N channle +3	dB	-	-	-
	C/N 40 MHz	dB	-	-	-
	S/N channel	dB	-	-	-
	S/N with 80 mixed channels	dB	-	-	-
main features					
Supply voltage		Vac,Hz	-	-	-
Programming mode			TPE (not included)	TPE (not included)	TPE (not included)
Consumption		W	400	500	400
Connectors			2 F connectors (output + in mix)	2 F connectors (output + in mix)	2 F connectors (output + in mix)
Conformity			-	-	-
operating temperature		C°	-10 - +55	-10 - +55	-10 - +55
Dimensions		mm	120 x 97 x 43	120 x 97 x 43	120 x 97 x 43

Headend

K SERIES

KX125

KX Satellite amplifier Series

Amplifies satellite IF (950-2150MHz) whilst mixing terrestrial TV frequencies of 47-862MHz.
Overcomes the higher losses experienced when distributing SAT IF.

		KX125	KX125NT	KX125E
Code		282104	282105	282106
Frequency	MHz	950-2150 / 47-862	950-2150 / 47-862	950-2150 / 47-862
Gain	dB	38-44	35	38-44
Gain adj.	dB	20	20	20
Slope	dB	6	0	6
Max power	dBµV	125	125	125
Noise figure	dB	6	6	6
Return loss	dB	10	10	10
Main features				
Impedance	Ohm	75	75	75
Consumption	mA	310@12VDC	280@12VDC	310@12VDC
operating temperature	C°	-10 - +55	-10 - +55	-10 - +55
Dimensions	mm	32 x 129 x 86	32 x 129 x 86	32 x 129 x 86

K SERIES

KFT/.

KFT Series trasponder amplifier

The KFT module selects and amplifies a DVB-S/S2 transponder between 950 to 2150MHz. The filter uses K series housing with F connectors and is self-mixing both for input and output.

		KFT/.	KFT/..	KFT/...
Code		282614	282615	282616
Frequency	MHz	950-1450	1451-1700	1701-2500
Freq. band	MHz	36	36	36
Gain	dB	18	18	18
Gain adj.	dB	20	20	20
Mix in loss	dB	1	1	1
Mix out loss	dB	1	1	1
Noise figure	dB	9	9	9
Max output level	dBµV	100	100	100
Main features				
Supply voltage	V	12	12	12
Consumption	mA	105	105	105
operating temperature	C°	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	32 x 129 x 86	32 x 129 x 86	32 x 129 x 86

K SERIES

KFB5/..

KFT Series trasponder amplifier

The KFT module selects and amplifies a DVB-S/S2 transponder between 950 to 2150MHz. The filter uses K series housing with F connectors and is self-mixing both for input and output.

		KFB3	KFB4	KFB5	KFB5/..	KFBU
Code		270063	270054	270055	270062	270064
Frequency	MHz	174-240	470-590	606-862	Special tuning on demand	470-862
Freq. band	MHz	7/8	8	8	8	8
Channels		E5-E12	E21-E35	E38-E69	E38-E69	E38-E69
Gain	dB	30	13	11	11	30
Gain adj.	dB	20	20	20	20	20
Input Return Loss	dB	10	10	10	10	10
Output Return Loss	dB	10	15	15	10	10
Mix out loss	dB	0.5	0.5	0.5	0.5	0.5
Noise figure	dB	5	4	4	5	5
Max output level	dBµV	107	107	107	100	111
Main features						
Supply voltage	V	12	12	12	12	12
Consumption	mA	100	130	130	130	100
operating temperature	C°	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	32x129x86	32x129x86	32x129x86	32x129x86	32x129x86

Headend

K SERIES

KW33B

KW wide band amplifier Saries

Broadband launch amplifier with pushpull technology allows the amplification of the whole 47-862MHz band, including the S band. With one input and one output, the KW series are used to amplify the signal from KF filters or other modules.

The KW35E passes the return channel (5-30MHz).

- 75 ohm impedance
- Return loss 10dB

			KW33B	KW33C	KW44C	KW20D	KW35D	KW35E
Code			270050	270053	270051	270049	270061	270059
Frequency		MHz	47-862	47-862	47-862	47-862	47-862	5-30 / 47-862
Gain	950-2150 MHz	dB	34	32	44	20	35	35
Gain adj.		dB	20	20	20	20	20	20
Slope		dB	0-20	0-20	0-20	0-20	0-20	0-20
Max power		dBµV	116	120	120	125	125	129
Noise figure		dB	8	9	8	6	5	6
main features								
Consumption		mA	300	510	550	550	640	830
operating temperature		C°	-10 - +55	-10 - +55	-10 - +55	-10 - +55	-10 - +55	-10 - +55
Dimensions		mm	32 x 129 x 86	63 x 184 x 107	63 x 184 x 107	63 x 184 x 107	63 x 184 x 107	63 x 184 x 107

K SERIES

KP15

KP Series Switching power supply

The power supply units contain switching technology to ensure the best performance and reliability.

Operating temperature: -10°C to +55°C.

		KP15	KP35	KP62
Code		270018	270017	270019
Supply voltage	V	220-240, 50-60	220-230, 50-60	220-240, 50-60
Consumption	W	23	55	88
Max current	mA	1500	3500	6200
Output voltage	Vdc	12 ± 5%	12 ± 5%	12 ± 5%
Isolation		Class II	Class II	Class II
operating temperature	C°	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	130 x 40 x 86	165 x 63 x 107	165 x 63 x 107

HEADLINE Series

SIG7531

DVB-T receiver Series

COFDM Digital receiver with A/V RCS output connector and back panel TSto receive DVB-T FTA channels. Single TV input and loop-through output to connect several receiver on the same aerial.

- Easy to upgrade
- Jumper cable KPR41 included.
- Compatibile MPEG2 / MPEG4

			SIG7531	SIG7540
CodE			283952	283951
Front-end	Input No.	No.	1	1
	Input frequency	MHz	174 - 230, 470 - 860	174 - 230, 470 - 860
	Inoput Level	dBµV	30-80	30-80
	Impedance	Ohm	75	75
	Freq. band	MHz	7, 8	7, 8
	Freq. step	KHz	167	167
	Demodulator		DVB-T (QPSK, 16QAM, 64QAM)	DVB-T (QPSK, 16QAM, 64QAM)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	Msymb	2-30	2-30
	AFC inteval	MHz	±285 (2k), ±142 (8k)	±285 (2k), ±142 (8k)
	Hierarchi		High/low priority	High/low priority
	Carriers	K	2, 8	2, 8
	Frequency band	MHz	47-862	47-862
	loop through gain	dB	-3 - +2	1
MPEG Specs	Decoder video		MPEG-2 MP@ML	MPEG-2 MP@ML
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M
	Video format		Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato
	Audio Format		Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo
	Teletext		yes	yes
A/V Outputs	Video type		Composite	Composite
	Video level	Vpp-Ohm	1 typ - 75	1 typ
	Max audio level	Ohm,mVras	550	550
	Audio adj.	dB	0-10	0-10
	S/N ratio	dB	45	45
Output TS	Connectors		Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Parallel
Main features				
	Max module No.		Related to frequency and signal levels	Related to frequency and signal levels
	Common interface		PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode		TPE	TPE
	Consumption	W	4.5	11
	Connectors		2 F female, 3 RCA	RCA female
	Conformity		EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05
	operating temperature	C°	-5 - +45	-5 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-

Headend

			SIG7531	SIG7540
CodE			283952	283951
Front-end	Input No.	No.	1	1
	Input frequency	MHz	174 - 230, 470 - 860	174 - 230, 470 - 860
	Inoput Level	dBµV	30-80	30-80
	Impedance	Ohm	75	75
	Freq. band	MHz	7, 8	7, 8
	Freq. step	KHz	167	167
	Demodulator		DVB-T (QPSK, 16QAM, 64QAM)	DVB-T (QPSK, 16QAM, 64QAM)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	Msymb	2-30	2-30
	AFC inteval	MHz	±285 (2k), ±142 (8k)	±285 (2k), ±142 (8k)
	Hierarchi		High/low priority	High/low priority
	Carriers	K	2, 8	2, 8
	Frequency band	MHz	47-862	47-862
	loop through gain	dB	-3 - +2	1
MPEG Specs	Decoder video		MPEG-2 MP@ML	MPEG-2 MP@ML
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M
	Video format		Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato
	Audio Format		Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo
	Teletext		yes	yes
A/V Outputs	Video type		Composite	Composite
	Video level	Vpp-Ohm	1 typ - 75	1 typ
	Max audio level	Ohm,mVras	550	550
	Audio adj.	dB	0-10	0-10
	S/N ratio	dB	45	45
Output TS	Connectors		Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Parallel
Main features				
	Max module No.		Related to frequency and signal levels	Related to frequency and signal levels
	Common interface		PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode		TPE	TPE
	Consumption	W	4.5	11
	Connectors		2 F female, 3 RCA	RCA female
	Conformity		EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05
	operating temperature	C°	-5 - +45	-5 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-

HEADLINE Series

SIG7330

DVB-S receiver Series

The SIG7330 QPSK receivers with audio/video outputs on RCA (cinch connectors to receive free-to-air digital satellite programs.
back Panel output
Loop through to connecto mani receiver on the same dish

- LNB power supply, 14/18V 0/22KHz, DiSEqC 1.0
- Easy to upgrade

			SIG7330	SIG7340	SIG7100
CodE			283954	283955	283949
Front-end	Input No.	No.	1	1	1
	Input frequency	MHz	950-2150	950-2150	950-2150
	Inoput Level	dBµV	48-85	48-85	48-85
	Impedance	Ohm	75	75	75
	Freq. band	MHz	7, 8	7, 8	7, 8
	Freq. step	KHz	1000	1000	1000
	insertion loss	dB	-	-	-
	Remote feeding	V	200 14V; 100 18V	200 14V; 100 18V	200 14V; 100 18V
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)	0/14/18VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)	0/14/18VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)
	Demodulator		DVB-S (QPSK)	DVB-S (QPSK)	DVB S2 (8-PSK, QPSK), DVB-S (QPSK)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	Msymb	2-40	2-40	2-40 (DVB-S), 2-30 (DVB-S2)
	AFC inteval	MHz	±5	±5	±5
	Hierarchi		High/low priority	High/low priority	High/low priority
	Carriers	K	-	-	-
	Frequency band	MHz	950-2150	950-2150	950-2150
	loop through gain	dB	-2	-2	-2
Input TS	Connectors		48 PIN connector	48 PIN connector	-
	Type		8bit parallel	8bit parallel	-
	Max Bitrate	Mbit/s	100	100	-
MPEG Specs	Decoder video		MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M
	Video format		Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato
	Audio Format		Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo
	Teletext		yes	yes	yes

Headend

			SIG7330	SIG7340	SIG7100
A/V Outputs	Video type		Composite	Composite	Composite
	Video level	Vpp-Ohm	1 typ - 75	1 typ - 75	1 typ - 75
	Max audio level	Ohm,mVras	550	550	550
	Audio adj.	dB	0-10	0-10	0-10
	Frequency band	MHz	20-15000	20-15000	20-15000
	S/N ratio	dB	45	45	45
Output TS	Connectors		Back Panel 48 pin	Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Parallel	8bit parallel
Main features					
	Max module No.		Related to frequency and signal levels	Related to frequency and signal levels	Related to frequency and signal levels
	Common interface		PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)
	Supply voltage	V	220-240, 50-60	220-240, 50-60	220-240, 50-60
	Programming mode		TPE	TPE	TPE
	Consumption	W	11	11	11
	Connectors		RCA female	RCA female	RCA female
	Conformity		EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05
	operating temperature	C°	-5 - +45	-5 - +45	-10 - +45
	Dimensions	mm	35.5(7e) x 130(3U) x 240	35.5(7e) x 133(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-	-

HEADLINE Series

SIG7282

Analog modulator Series

Audio video modulators, double conversion, double saw filter and tracking filter built in. One modulator covers the whole 47-862MHz band and a very high C/N ratio in the band allows the distribution of more than 80 channels. Available in PAL B/G mono (SIG7282), PAL B/G stereo (SIG7282S) and multistandard SIG7281).

- Fully agile output modulators, with double conversion, saw filter and tracking filter built in. Using only one modulator, the whole 47-862MHz band can be covered, simplifying the installation and maintenance of the system.
- High output level, 95dBu, to perfeclty mix up to 80 channels.
- RCA (cinch) connectors for audio and video input, F connectors for RF output
- RCA 70 cm cable and KPR41 jumper included

			SIG7282	SIG7282S	SIG7281
Code			283943	283944	283933
Input No.		No.	-	-	-
CVideo Input	Impedance	Ohm	75	75	75
	Level adj.	Vpp	0.7-1.4	0.7-1.4	0.7-1.4
	Impedance	Ohm	10	10	10
	Level adj.	Vpp	0.5-3.5	0.5-3.5	0.5-2
Standard			PAL B/G mono Mono	PAL B/G Stereo Mono, stereo, dual sound	Multistandard N, H, D/K, I, L
Audio carrier frequency	B/G mono	MHz	5.5	5.5	-
	B/G stereo	MHz	-	-	-
	Left carrier	MHz	-	-	-
	Right carrier	MHz	-	5.74	-
	L	MHz	-	-	6.5
	H	MHz	-	-	5.5
	D	MHz	-	-	6.5
	K	MHz	-	-	6.5
	I	MHz	-	-	6
	N	MHz	-	-	4.5
Audio/video carrier ratio	N	dB	-	-	10
	H	dB	-	-	14
	I	dB	-	-	14
	D/K	dB	-	-	13
	L	dB	-	-	8
	B/G mono	dB	13	13	-
	B/G stereo	dB	-	20	-
Modulation 1KHz, 0.5Vrms on audio input	B/G	KHz	45	45	49
	N (FM)	KHz	-	-	32
	H	KHz	-	-	>47
	I, D/K (FM)	KHz	-	-	>47
	L (AM)	KHz	-	-	80%
Modulation width with 1Vpp on video input	D/K, I, B/G	%	-	-	-
	L	%	-	-	-

Headend

			SIG7282	SIG7282S	SIG7281
RF output signal	Frequency	MHz	47-862	47-862	47-862
	Channels		E2-E69	E2-E69	E2-E69
	Set up	MHz	-	-	-
	Trasmission Standards		-	-	-
	Created Channels		-	-	-
	Max input level	dBµV	95±2	95±2	95±2
	Level adj.	dB	0-15	0-15	0-15
	insertion loss	dB	<1.5	<1.5	<1.5
	Return loss	dB	>10	>10	>10
	Spurious rejection	dB	>60	>60	>54
	S/N ratio	dB	>50	>50	>54
	Channel C/N	dB	-	-	-
	C/N channle +3	dB	>66	>66	>68
	C/N 40 MHz	dB	>70	>70	>75
	S/N channel	dB	50	50	50
	S/N with 80 mixed channels	dB	48	48	48
main features					
Programming mode			TPE	TPE	TPE
Consumption		W	8	8	8
operating temperature		C°	-10 - +45	-10 - +45	-5 - +45
Dimensions		mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240

HEADLINE Series

SIG7120

DVB-T Modulator Series

The SIG7120 modulates a signal (TS) received in the input from the back panel in COFDM DVB-T standard.
On the front panel there is an additional F connector for output loop-through feature.

- Integrated LCN
- Possibility to choose the desired COFDM modulation
- Output level adjustment
- High Definition (HD) compliant
- When connected to different receivers (SAT, COFDM, A/V, etc.), different types of transmodulation can be performed
- Compatibile MPEG2/MPEG4

			SIG7120	SIG7121
CodE			283950	283953
Input TS	Connectors		48 PIN connector	48 PIN connector
	Type		Parallel	Parallel
	Max Bitrate	Mbit/s	100	100
Input ASI	Connectors		-	BNC, 75 Ohm
	Max Bitrate	Mbit/s	-	216
Output modulation	Output Multiplex	No.	1	1
	Trasmission Standards		DVB-T	DVB-T
	Freq. band	MHz	6, 7, 8	6, 7, 8
	Carriers	K	2k, 8k	2k, 8k
	Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM
	Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32
	Symbol rate	Msymb	2000/40000	2000/40000
	Spectrum		Normal, inverted	Normal, inverted
Output TS	Connectors		Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Parallel
RF output signal	Frequency	MHz	111-862	111-862
	Channels		S2-E69	S2-E69
	Used Channels	No.	1	1
	Freq. step	KHz	10	10
	Max power	dBµV	85±2	85±2
	Level adj.	dB	0-15	0-15
	Flatness		≤ ± 1	≤ ± 1
	DTT signal MER	dB	38	34
	Spurious rejection	dB	>50	>50
	TV signals mix	MHz	47-862	47-862
	insertion loss	dB	<1.5	<1.5
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode		TPE	TPE
	Consumption	W	10	10
	Connectors		F Female	F Female
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	C°	-10 - +45	-10 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-

Headend

HEADLINE Series

SIG7404H

SIG7804H264

Encoder FROM analog/HDMI to ASI Series

The SIG7404H 19" standard rack format is a Standard Definition Encoder which encode and remux its four Audio/Video composite input sources onDVB-ASI output interface.
Can be connected to an IP encoder to realize multicast streams.

- Codify and multiplexing of 4 A/V signals
- Perfect to convert from AV to COFDM (with SIG7121) or from AV to IP
- MPEG 2 coding
- Bit rate 1-15Mbps
- Suported format Full D1, Half D1, SIF, QSIF
- Pal and NTSC format

			SIG7404H	SIG7804H264
Code			287348	287430
Input	No.		4 x CVBS	4 x HDMI (recipiente tripla A)
Input	Video connector		RCA	Conforme con HDMI 1.3a
Input	Video impedance	Ohm	75	-
Input	Audio connector		RCA (left, right audio channels)	HDMI
Input	Audio impedance	KOhm	10	-
ASi output	Output no.		1 x BNC	1 x BNC
ASi output	Impedance	Ohm	75	75
ASi output	Standard		DVB-ASI	DVB-ASI
ASi output	Max output bitrate	Mbps	108	2016
Coding				
Video resolution			576i/480i	1080p@60Hz
Video compression			MPEG-2 Video(ISO/IEC 13818-2) MPEG-2 MP@ML	H264/AVC
Audio compression			MPEG-1 Audio Layer II (ISO/IEC 11172-3)	MPEG-1 Audio Layer II (ISO/IEC 11172-3)
Audio coding ratio			128, 256, 384	128, 256, 384
Advanced set up				
PID settings			PMT/Video/Audio/PCR	PMT/Video/Audio/PCR
Network set up TS			NID/ONID/P.D.S./TS ID	NID/ONID/P.D.S./TS ID
LCN set up			1023	1023
main features				
Supply voltage		Vac,Hz	110-240, 50-60	110-240, 50-60
Consumption		W	25	40
Connectors			BNC (ASI Out), RCA (A/V), RJ45 (built-in WEB interface set up)	BNC (ASI Out), HDMI1.3a (segnale video e audio), RJ45 (settaggi tramite interfaccia WEB built-in)
Conformity			EN50083-2, EN60065	EN50083-2, EN60065
operating temperature		C°	0 - +45	0 - +45
Mounting			19" rack	19 pollici standard montato in Rack
Dimensions		mm	440 x 44 x 280	440 x 44 x 280

HEADLINE Series

SIG7710

Encoder from DVB-T/S (Free to air) to IP Series

The encoders work as a DVB-S (SIG7710) and DVB-T (SIG7730) to IP gateway. Satellite and Digital Terrestrial Television signals are received on the F connector input, converted to IP standard signals and streamed through RJ45 output port into LAN.
services and programs can be distributed both as unicast and multicast.

- From the user side, the programs and services can be viewed using an IP set top box (STB) on TV devices or using dedicated software on PC.
- Loop-through (active/passive) input allows easy management of the headend

			SIG7710	SIG7730
Code			283945	283946
Front-end	Input No.	No.	1	1
	Input frequency	MHz	950-2150	174-230/470-862
	Inoput Level	dBµV	40-84	30-80
	Impedance	Ohm	75	75
	Freq. band	MHz	7, 8	7, 8
	Freq. step	KHz	1000	166.7
	insertion loss	dB	-	-
	Remote feeding	mA	200 14; 100 18	201 14; 100 18
	LNB controls		0/14/18, 0/22, 200 DISEqC 1.0	0/14/18, 0/22, 200 DISEqC 1.0
	Demodulator		DVB-S (QPSK)	DVB-T (QPSK, 16QAM, 64QAM)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	Msymb	1-40	2-35
	AFC inteval	MHz	±3	±285 (2k), ±142 (8k)
	Hierarchi		High/low priority	High/low priority
	Carriers	K	2, 8	2, 8
	Frequency band	MHz	950-2150	174-230, 470-862
	loop through gain	dB	0.8, -1.7	2 (on), -0,5 (off)
Output modulation	Trasmission Standards		MPEG2TS on UDP or MPEG2TS on RTP/UDP. Re-build tables PAT, PMT, SDT	MPEG2TS on UDP or MPEG2TS on RTP/UDP. Re-build tables PAT, PMT, SDT
LAN	Inteface		IEEE 802.3 100BaseT	IEEE 802.3 100BaseT
	Incapsulation		ETSI TS102034	ETSI TS102034
	Streaming type		Multicast/unicast	Multicast/unicast
	Web services		DVB incapsulation, http, TELNET, FTP, SAP	DVB incapsulation, http, TELNET, FTP, SAP
Main features				
	Max module No.		Related to frequency and signal levels	Related to frequency and signal levels
	Common interface		-	-
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode		TPE, PC	TPE, PC
	Consumption	W	11	8
	Connectors		2 F, RJ45	2 F, RJ45
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	C°	-10 ÷ +45	-5 ÷ +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-

Headend

HEADLINE Series

SIG7720

Encoder from TS (Transport stream) to IP Sereis

The SIG7720 encoder works from Transport Stream (TS) to IP gateway.
Signals are received from the back-panel, converted to IP standard signals and streamed through RJ45 output port into LAN. Input signal can be received from either SIG7100 module (DVB-S2 to TS) or SIG7540 module (DVB-T to TS).

- Set up of all the receiver thorough web interface

			SIG7720
CodE			283947
Input TS	Connectors		48 PIN connector
	Type		Parallel
	Max Bitrate	Mbit/s	100
	Trasmission Standards		MPEG2TS on UDP or MPEG2TS on RTP/UDP. Re-build tables PAT, PMT, SDT
LAN	Inteface		IEEE 802.3 100BaseT
	Incapsulation		ETSI TS102034
	Streaming type		Multicast/unicast
	Web services		DVB incapsulation, http, TELNET, FTP, SAP
Main features			
	Supply voltage	V	220-240, 50-60
	Programming mode		TPE, PC
	Consumption	W	8
	Connectors		RJ45
	Conformity		EN50083-2, EN60065
	operating temperature	C°	-5 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-

HEADLINE Series

SIG7600-HTX

Head line optical transmitter Sereis

Head line optical transmitter convert the RF signal from 47-2150 into an optical signal
1310 nm laser with 13 mW (11dBm) optical power.
Optical signal can be splitted several times
5 different LEDs to che del muduleoperating functions

- High optical power
- High Definition (HD) compliant
- High S/N ratio

		SIG7600-HTX
Code		270678
RF inputs		1 TV + 1 SAT
Optical output		1 SC/APC
SAT Inputs		
Frequency band	MHz	950-2150
Connectors type		F female
Return loss	dB	10
Input Level	dBµV	96
TV Input		
Frequency band	MHz	87-862
Connectors type		F female
Return loss	dB	10
Input Level	dBµV	96
Optical output		
Connectors type		SC/APC
Wavelenght		1310±20
Optical power	dB	11
Optical return loss	dBµV	>45
Safety level		3A
main features		
Supply voltage	Vac/Hz	220-240, 50-60
Consumption	W	4
Operating temperature	°C	-10 - +45
LEDs	dBµV	Power status green
Standards		CEI EN 50083-2 EN60065
Dimensions	mm	170x285x70

Headend

HEADLINE Series

SPLITTER series

Optical splitters that split the optical signal into two outputs (SIG7622) and four outputs (SIG7624).
Splits all the optical signals on all outputs

- Low insertion loss
- High Definition (HD) compliant

SIG7622

		SIG7622	SIG7624
Code		270687	270688
Inputs	No.	1	1
Outputs	No.	2	4
Connectors type	Type	SC/APC	SC/APC
Wavelenght	nm	1290-1600	1290-1600
Insertion loss	dB	3.2	6.4
Return loss	dB	>55	>55
Isolation	dB	>45	>45
Operating temperature	°C	-20 - +55	-20 - +55
Standards		CEI EN 60825-1 CEI EN 60825-2	-
Dimensions	mm	32x129x86	32x129x86

HEADLINE Series

SUB Rack Series

19" Sub-rack ti fit up to eleven Head line module.
Interconnection module to power and address the headline modules.
The interconnection module is installed in sub-rack SIG7901 or SIG7902.

SIG7901

Item	Code	Description	Packa-ging
SIG7901	283930	Interconnection module to power and address the headline modules. SIG7900 included on the packing All the accessorie are included inthe packing	1

HEADLINE Series

TPE - Code 282733

FHM - Code 289888

KRS-RJ - Code 282732

TPE programming unit

Enables the programming of all new K Series modules, DIGIFLEX, Headline range and K Series modules.

- USB drivers available for PC connection
- Language menu available: Italian, English, German, French, Spanish and Portuguese
- Max. addressable modules: 253
- Copy function available, to copy the settings from one device to another
- Adjustable contrast (31 steps), Display: LCD graphic backlit display, 16x4 characters
- 18 button keypad

FHM and USB-RJ45 adapter

Management Software and USB-RJ45 adapter suitable for K Series, SAF, SIG9708CI, HEADLine

- Using FHM the critical parameters of connected modules can be viewed locally or remotely
- For user defined parameters an upper and lower alarm limit can be set

RACK

RACK42U

RACK Series

The range includes two floor standing cabinets and one wall mounted cabinet, with accessories, to be used to install SMATV headends for K Series and Headline. The cabinets and accessories are available on request with a delivery time of 20 days from order. All the products are packaged individually.

RACK6U

Item	Code	TPE	Description	Pack.
RACK42U	289722		19" wall mounted cabinet. Tempered glazed door that can be rotated 180°.The 19" uprights are adjustable according to the depth of the equipment to be installed.Two apertures for power cables at floor level or at the top where aventilation kit can be fitted.	1
RACK27U	289721		19" wall mounted cabinet. Tempered glazed door that can be rotated 180°.The 19" uprights are adjustable according to the depth of the equipment to be installed.Two apertures for power cables at floor level or at the top where aventilation kit can be fitted.	1
RACK6U	289720		19" floor standing cabinet. Tempered glazed door. All side and rear cabinet panels can be disassembled for easy installation of equipment. The 19" uprights are adjustable according to the depth of the equipment to be installed. Two apertures for feeding cables into the unit at floor level or at the top where a ventilation kit	1

Rack accessories

RACK01

RACK04

RACK06

RACK08

RACK11

RACK12

Item	Code	Description
RACK01	289708	Set of 50 M6 cage nuts and 50 screws.
RACK02	289709	Leveling feet
RACK03	289710	Set of 4 levelling feet
RACK04	289711	1U cable inlet panel
RACK05	289712	3U blank panel
RACK06	289713	19" shelf - 250mm
RACK07	289714	1U blank panel
RACK08	289715	2U, 150mm recessed panel
RACK09	289716	4U, 150mm recessed panel
RACK10	289717	2 fan units with steel grid. Recommended for RACK27U
RACK11	289718	3 fan units with steel grid and thermostat. Recommended for RACK42U
RACK12	289719	Power duct with 5 universal sockets with magneto-thermal switch (4.5kA)

Optical fibre

HOME FIBRE

OPT-TX DT

OPT TX Series

The fiber optic system has been designed to distribute easily content as Analogue FM radio and DAB, DVB/T signals ,DVB/S-S2 from the headends to the optical receivers. The system works with standard LNB and many different dishes size thanks to the built in AGC distributing the signals on a 9/125 optical fibre. Additional transimtter can be connected in a cascadable mode to enlarge the system with a traditional 5 coax trunk line.

- Standard HVHV INB
- AGC on trasmitters allow the use of different dish dimensions
- Cascadable solution
- 21 dB optical budget
- Quick and easy installation
- Full terrestrial path
- Built in power supply

		OPT-TX DT	OPT-TX 1510	OPT-TX 1530	OPT-TX 1550	OPT-TX 1570
Code		270694	270667	270668	270669	270670
RF inputs		5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)
RF outputs		7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)
Optical output		1 SC/APC	1 SC/APC	1 SC/APC	1 SC/APC	1 SC/APC
SAT Inputs						
Frequency band	MHz	950-2150	950-2150	950-2150	950-2150	950-2150
Connectors type		F female	F female	F female	F female	F female
Return loss	dB	10	10	10	10	10
Trunk line loss	dB	<2	<2	<2	<2	<2
Input Level	dBµV	69-86	69-86	69-86	69-86	69-86
TV Input						
Frequency band	MHz	87-862	87-862	87-862	87-862	87-862
Connectors type		F female	F female	F female	F female	F female
Return loss	dB	10	10	10	10	10
Trunk line loss	dB	1	1	1	1	1
Input Level	dBµV	80 @10 ch	80 @10 ch	80 @10 ch	80 @10 ch	80 @10 ch
Output test						
Frequency band	MHz	87-862 / 950-2150	87-862 / 950-2150	87-862 / 950-2150	87-862 / 950-2150	87-862 / 950-2150
Connectors type		F female	F female	F female	F female	F female
Return loss	dB	10	10	10	10	10
Test attenuation	dBµV	59 per channel	59 per channel	59 per channel	59 per channel	59 per channel
Optical output						
Connectors type		SC/APC	SC/APC	SC/APC	SC/APC	SC/APC
Wavelenght		1310	1510	1530	1550	1570
Optical power	dB	7.5	6.5	6.5	6.5	6.5
Optical return loss	dBµV	>45	>45	>45	>45	>45
Safety level		1M	1M	1M	1M	1M
main features						
Remote feeding	mA, V	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)
Operating temperature	°C	-5 - +55	-5 - +55	-5 - +55	-5 - +55	-5 - +55
CAG dynamics	dB	20	20	20	20	20
LEDs	dBµV	Red laser overcurrent	Red laser overcurrent	Red laser overcurrent	Red laser overcurrent	Red laser overcurrent
Standards		CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065
Dimensions	mm	230x230x50	230x230x50	230x230x50	230x230x50	230x230x50

Optical fibre

HOME FIBRE

OPT-RX series

Home fibre optical receiver with Quattro (HVHV+TV) outputs, Quad, or SCD2(dCSS)

- 21 dB optical budget
- Quick and easy installation
- Full terrestrial path

OPT RX 4 MINI

OPT RX QUAD MINI

OPT_RX-TV

		OPT RX 4 MINI	OPT RX QUAD MINI	OPT-RX-TV
Code		270666	270665	270696
Optical input		1 SC/APC	2 FC/PC	1 FC/PC with SC/APC patchcord
RF outputs		4 SAT (VL,HL,VH,HH)+TV	4 (TV + SAT)	1 TV + 1 SAT
Optical input				
Connector		SC/APC	FC/APC	FC/APC
Wavelenght	nm	1290-1600	1290-1600	1290-1600
Optical return loss	dB	>45	>45	>45
Max. Input optical power	dB	-8	-8	-8
RF outputs				
Frequency band	MHz	88-862/950-2150	88-862/950-2150	88-862/950-2150
Connectors type	Type	F female	F female	F female
Return loss	dB	-10	-10	-10
TV output level				
-8dBmo(40Mux)	dBµV	79	81	73
-8dBmo(16Mux)	dBµV	82	84	77
-8dBmo(8Mux)	dBµV	85	87	80
-14dBmo(40Mux)	dBµV	67	69	61
-14dBmo(16Mux)	dBµV	70	72	65
-14dBmo(8Mux)	dBµV	73	75	68
SAT output level				
-8dBmo	dBµV	80	76	78
-14dBmo	dBµV	68	64	66
main features				
Supply voltage	Vac/Hz	-	-	184-264, 50-60
Consumption	W	3.5	3.5	2.5
Current consumption	mA, V	225, 14 175, 18	280, 12 190, 18	-
Voltage	V	14/18 on all outputs	14/18 on all outputs	-
Operating temperature	°C	-5 - +50	-5 - +50	-5 - +50
LEDs	dBµV	Power status green	Power status green	Power status green
Standards		CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065
Dimensions	mm	160x115x35	160x98x30	120x97x43

HOME FIBRE

OPT RX SCD2 series

Home fibre optical receiver with SCD2(dCSS), Unicable II technology able to serve upto 16 userband per RF output.

- 21 dB optical budget
- Quick and easy installation
- Full terrestrial path

OPT RX SCD2

			OPT RX SCD2	OPT RX SCD2 UK
Code			270664	270663
Optical input			2 FC/PC	2 FC/PC
RF outputs			up to 32 users SCD2 (dCSS) in 2 coax cables	
Optical input				
Connector			FC/APC	FC/APC
Wavelenght		nm	1290-1600	1290-1600
Optical return loss		dB	>45	>45
Max. Input optical power		dB	-8	-8
RF outputs				
Frequency band		MHz	88-862/950-2150	88-862/950-2150
SCR frequencies		MHz	-	-
Connectors type	Type		F female	F female
Return loss		dB	-10	-10
TV output level	-8dBmo(40Mux)	dBµV	87	87
	-8dBmo(16Mux)	dBµV	91	91
	-8dBmo(8Mux)	dBµV	94	94
	-14dBmo(40Mux)	dBµV	75	75
	-14dBmo(16Mux)	dBµV	79	79
	-14dBmo(8Mux)	dBµV	82	82
SAT output level	-8dBmo	dBµV	82	82
	-14dBmo	dBµV	82	82
Main features				
Supply voltage		Vac/Hz	-	-
Consumption		W	9	9
Current consumption		mA, V	500, 18 - 750, 12	
Voltage		V	14/18 on all outputs	14/18 on all outputs
Operating temperature		°C	-5 - +50	-5 - +50
LEDs		dBµV	Power status green	Power status green
Standards			CEI EN 50083-2	CEI EN 50083-2
Dimensions		mm	250x140x50	250x140x50

Installation example

Optical fibre

SPLITTER

Vov series

Miniaturize optical splitter to be used on small dimension installation boxes.

- 3mm connector
- Cap to protect the fiber ferule
- Compact splitter and taps
- Tree or star distribution
- Quick and easy installation
- Wavelength from 1260 to 1590nm
- Operating temperature from - 20° to 55°
- Dimensions 83x59x17 mm

VOV2

VOV4

		VOV2	VOV4
Code		287210	287211
Inputs	No.	1	1
Outputs	No.	2	4
Wavelenght	nm	1290-1600	1290-1600
Insertion loss	dB	<3.9	<7.8
Return loss	dB	>55	>55
Isolation	dB	>45	>45

		VOT1/2	VOT2/3	VOT3/4
Code		287215	287216	287217
Inputs	No.	1	1	1
Outputs	No.	1+4 der	1+4 der	1+4 der
Wavelenght	nm	1290-1600	1290-1600	1290-1600
Insertion loss	dB	<2.5	<3.1	<3.8
Tap loss	dB	<15	<13.7	<11.4
Return loss	dB	>55	>55	>55
Isolation	dB	>45	>45	>45

		VOT70/30	VOT80/20	VOT90/10
Code		287212	287213	287214
Inputs	No.	1	1	1
Outputs	No.	1+1 der	1+1 der	1+1 der
Wavelenght	nm	1290-1600	1290-1600	1290-1600
Insertion loss	dB	<2.1	<1.5	<0.8
Tap loss	dB	<6.4	<8.5	<12.7
Return loss	dB	>55	>55	>55
Isolation	dB	>45	>45	>45

Fibre accessories

Optical fiber cable series

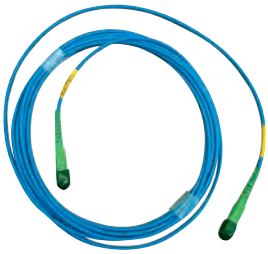
PR003

Item	Code	Description	Type	Length (m)	Con-nector	Pcs
PR003	287219	Preterminated single mode fibre	9/125	3	Mini-Mini	1
PR005	287220	Preterminated single mode fibre	9/125	5	Mini-Mini	1
PR010	287221	Preterminated single mode fibre	9/125	10	Mini-Mini	1
PR025	287222	Preterminated single mode fibre	9/125	25	Mini-Mini	1
PR035	287327	Preterminated single mode fibre	9/125	35	Mini-Mini	1
PR050	287328	Preterminated single mode fibre	9/125	50	Mini-Mini	1
PR075	287329	Preterminated single mode fibre	9/125	75	Mini-Mini	1
PR100	287223	Preterminated single mode fibre	9/125	100	Mini-Mini	1
OPCGC96	287451	Outdoor 96 single mode fibre cable with steel armored	96 fibre 9/125	300	Without connector	-
OPCCOL	287452	indoor LSZH 12 single mode fibre cable	12 fibre 9/125	300	Without connector	-
OPCCOL48	287453	indoor LSZH 48 single mode fibre cable	48 fibre 9/125	300	Without connector	-
OPCCOL96	287454	indoor LSZH 96 single mode fibre cable	96 fibre 9/125	300	Without connector	-
4SC/APC CONN	287345	Connectoring service OPC 4 ARM	4 Fibre 9/125	-	SC/APC SC/APC	1
8SC/APC CONN	287347	Connectoring service OPC 8 ARM	8 Fibre 9/125	-	SC/APC SC/APC	1
BR2-AA	289360	Single mode patch cord	9/125	2	SC/APC SC/APC	1
BR4-AA	289362	Single mode patch cord	9/125	4	SC/APC SC/APC	1
BFO-SC-APC	289349	SC\APC adapter	9/125	-	SC/APC SC/APC	10

Fibre accessories

Optical fiber cable series

OPC 4 ARM



BR2-AA

BF0-SC-APC

Item	Code	Description	Type	Length (m)
OPC 4 ARM	287344	Outdoor single mode loose tube fibre Glass antirodent protection	4 Fibre 9/125	Specify lenght
OPC 8 ARM	287346	Outdoor single mode loose tube fibre Glass antirodent protection	8 Fibre 9/125	Specify lenght
OPC 8 INDOOR	287425	Indoor 8 Fibre loose tube cable	8 Fibre 9/125	500
OPCAB02	287446	Indoor 2 single mode fibre cable LSZH jacket	2 fibre 9/125	1
OPCAB04	287447	Indoor 4 single mode fibre cable LSZH jacket	4 Fibre 9/125	1
OPCGC12	287448	Outdoor 12 single mode fibre cable with steel armored	12 fibre 9/125	300
OPCGC24	287449	Outdoor 24 single mode fibre cable with steel armored	24 fibre 9/125	300
OPCGC48	287450	Outdoor 48 single mode fibre cable with steel armored	48 fibre 9/125	300

Fibre accessories

Fibre acessories

MIN/MIN

OPTATT3DB

PR ADAPT

SUPP V0V/V0T

Item	Code	Description	Pcs
MIN/MIN	287225	MIN-MIN adapter	10
PIG TAIL	287426	900um single mode pigtail	1
FC-SC/APC	280011	Single mode patch cord	1
OPTATT3DB	287239	3dB optical attenuator	1
OPTATT7DB	287238	7dB optical attenuator	1
OPTATT14DB	287237	14dB optical attenuator	1
PR ADAPT	287226	SC/APC - Mini patch cord	1
SUPP V0V/V0T	287240	Wall mount for V0V and V0T	10
PULL_CONN	287224	Pulling connector for Mini	20

Optical fibre

K series

KTX Series

KTX optical transmitter works at 1310nm with a input RF band from 47MHz to 2150MHz

- Supply Voltage
- Power consumption 4W
- Remote feeding 80mA@12V max
- Operating temperature from -10°C to +55°C
- Standard conformity CEI EN 50083-2, EN60065
- Dimensions: 38x89x126mm (KTX); 32x129x86 (KTX-RC)

KTX

		KTX	KTX-RC
Code		270686	270671
RF inputs		1 TV + 1 SAT	Return path
RF outputs		Return path	1 TV + 1 SAT
Optical output		1 SC/APC	1 SC/APC
SAT Inputs			
Frequency band	MHz	950-2150	950-2150
Connectors type		F female	F female
Return loss	dB	10	10
Input Level	dBµV	107	96
TV Input			
Frequency band	MHz	87-862	87-862
Connectors type		F female	F female
Return loss	dB	10	10
Input Level	dBµV	107	107
Optical output			
Connectors type		SC/APC	SC/APC
Wavelenght		1310±20	1310±20
Optical power	dB	6	6
Optical return loss	dBµV	>45	>45
Safety level		1M	1M

K series

KRX Series

KRX optical receiver works at 1310nm with a output RF band from 47MHz to 2150MHz SC/APC optical connector

- Supply Voltage
- Power consumption 1,8W
- Operating temperature from -10°C to +55°C
- Standard conformity CEI EN 50083-2, EN60065
- Dimensions: 38x89x126mm (KRX); 32x129x86 (KRX-RC)

KRX

			KRX	KRX-RC
Code			270677	270672
Optical input			1 SC/APC	1 SC/APC
RF inputs			-	1 TV + 1 SAT
RF outputs			1 TV + 1 SAT	Return path
Optical input				
Connector			SC/APC	SC/APC
Wavelenght			1290-1600	1290-1600
Optical return loss			>45	>45
Max. Input optical power			6	6
RF outputs				
Frequency band		MHz	88-862/950-2150	5-65
Connectors type			F female	F female
Return loss		dB	-10	-10
TV output level	-0dBmo(40Mux)	dBµV	86	86
	-0dBmo(16Mux)	dBµV	89	89
	-0dBmo(8Mux)	dBµV	92	92

SPLITTER

KSP1 Series

Din rail optical splitter

- Slit the optical signal in 2 or 4 ways
- Can be inserted every where in the optical net without any remote feeding

KSP1_2

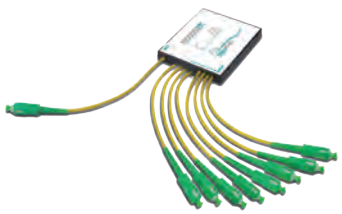
		KSP1_2	KSP1_4
Code		270679	270680
Inputs	No.	1	1
Outputs	No.	2	4
Connectors type	Type	SC/APC	SC/APC
Wavelenght	nm	1290-1600	1290-1600
Insertion loss	dB	<3.2	<6.4
Return loss	dB	>55	>55
Isolation	dB	>45	>45
Operating temperature	°C	-20 - +55	-20 - +55
Standards		CEI EN 60825-1 CEI EN 60825-2	CEI EN 60825-1 CEI EN 60825-2
Dimensions	mm	32x189x86	32x189x86

SPLITTER

PLC Series

PLC (planar waveguide) optical splitter allow the distribution of optical signals from 4 to 64 way with low insertion losses.

- Low insertion loss
- High retutrn loss
- Compact design
- SC/APc optical connector



PLC 1x8

		PLC 1x4	PLC 1x8	PLC 1x16	PLC 1x32	PLC 1x64
Code		287455	287407	287408	287409	287410
Inputs	No.	1	1	1	1	1
Outputs	No.	4	8	16	32	64
Connectors type	Type	SC/APC	SC/APC	SC/APC	SC/APC	SC/APC
Wavelenght	nm	1260-1650	1260-1650	1260-1650	1260-1650	1260-1650
Insertion loss	dB	<7.6	<10.1	<13.3	<16.7	<19.9
Return loss	dB	>55	>55	>55	>55	>55
Isolation	dB	>40	>40	>40	>40	>40
Operating temperature	°C	-20 - +55	-20 - +55	-20 - +55	-20 - +55	-20 - +55
Dimensions	mm	90x100x20	90x100x20	90x100x21	90x100x22	90x100x23

Optical fibre

SPLITTER

WDM Series

Optical wavelenght filters to MUX and DEMUX up to 5 different light "color"

- Color code to select the waveleght
- SC/APC connectors
- Solution for 2 or 5 wavelenght
- Quick and easy installation

WDM 2

		CWDM5	WDM 2
Code		287342	287343
Inputs	No.	1	1
Outputs	No.	5	2
Waveleght 1	nm	1510	1290-1350
Waveleght 2	nm	1530	1490-1600
Waveleght 3	nm	1550	-
Waveleght 4	nm	1570	-
Waveleght 5	nm	1310	-
Insertion loss	dB	<1.6	<0.5
Return loss	dB	>55	>55
Flatness	dB	<0.5	<0.5
Isolation	dB	>30	>30
Operating temperature	°C	-20 - +55	-20 - +55
Fibre			
Type		9/125	9/125
Lenght	m	1	1
Jacket		LSZH, G657A1	LSZH, G657A1
Connectors type	Type	SC/APC	SC/APC

OPT series

OPT-TX51 Series

OPT TX 51 convet and distribute 4 SAT polarities and 1 terrestrial path on a single fibre cable thankd to the integrated CWDM MUX

- Cingle optical cable distribution
- Mains supply 184-264V, 50-60Hz 5W max.

OPT-TX51

		OPT-TX51
Code		270689
RF inputs		5 (4 SAT + 1 TV)
Optical output		2 SC/APC
SAT Inputs		
Frequency band	MHz	950-2150
Connectors type		F female
Return loss	dB	10
Input Level	dBµV	117
TV Input		
Frequency band	MHz	87-862
Connectors type		F female
Return loss	dB	10
Input Level	dBµV	117
Optical output		
Connectors type		SC/APC
Wavelenght		1510-1530-1550-1570
Optical power	dB	5
Optical return loss	dBµV	>45
Safety level		1M
main features		
Supply voltage	Vac/Hz	184-264, 50-60
Consumption	W	5
Remote feeding	mA	300, 14 (4 SAT connectors)
Operating temperature	°C	-5 - +55
LEDs	dBµV	Power status green
Standards		CEI EN 50083-2 EN60065
Dimensions	mm	425x170x73

OPT series

OPT-RX51 Series

OPT RX 51 convet and distribute 4 SAT polarities and 1 terrestrial path with a single input fibre cable thanks to the integrated CWDM DEMUX SC/APC connectors

- Remote supply on all outputs 14V-240mA

OPT-RX51

		OPT-RX51
Code		270690
Optical input		1 SC/APC
RF outputs		4 (TV + SAT)
Optical input		
Connector		SC/APC
Wavelenght		1510-1530-1550-1570
Optical return loss		>45
Max. Input optical power	dBm	5
RF outputs		
Frequency band	MHz	88-862/950-2150
Connectors type	Type	F female
Return loss	dB	-10
TV output level		
-0dBmo(40Mux)	dBµV	88
-0dBmo(16Mux)	dBµV	91
-0dBmo(8Mux)	dBµV	94
-10dBmo(40Mux)	dBµV	68
-10dBmo(16Mux)	dBµV	71
-10dBmo(8Mux)	dBµV	74
SAT output level		
-0dBmo	dBµV	88
-10dBmo	dBµV	68
main features		
Consumption	W	4
Current consumption	mA, V	240, 14V
Remote feeding	mA	-
Voltage	V	14/18 on all outputs
Operating temperature	°C	-5 - +50
LEDs	dBµV	Power status green
Standards		CEI EN 50083-2 EN60066
Dimensions	mm	285x170x73

Optical fibre

HOME FIBRE

OPT-TX DATA Series

Data pon TX is an optical transmitter to distribute data over fibre up to 1.25Gb/sec per user up to 128 point.

- up to 128 ONU
- Max distance 20km
- user band management
- Telnet support
- VLAN protocols and support
- QOS, VID, TOS e MAC address
- IEEE802.3ah Standard conformity

DATA PON TX

		DATA PON TX
Code		287415
LAN Input		-
Optical output		
Connectors type		SC/PC
Porte PON		1000BASE-PX20 (1,25Gbps)
Wavelenght	nm	1310 Uplink, 1490 Downlink
Optical power	dBm	From +2 to +7 (1490nm)
Optical return loss	dBµV	>45
Optical receiver sensitivity	dBm	-
main features		
Supply voltage	Vac, Hz	90-264, 50-60
Consumption	W	16
Operating temperature	°C	0 - +50
Dimensions	mm	440x208x44

HOME FIBRE

Serie OPT-RX DATA

Data PON RX allow the data distribution on a fibre optical network in combination with DATA PON TX

- User bandwidth limitation and controls
- conform to IEE802.3ah
- up to 20km dintance
- 1xGE auot negotiation
- up to 100m on RJ45
- remote firmware upgrade
- EMS network management on SNMP
- Status monitor, configuration management, allarm management

DATA PON RX

		DATA PON RX	DATA PON RX WF
Code		287416	287417
LAN outputs		1 x RJ45	4 x RJ45 + (WIFI IEEE 802.11b/g/h)
Optical input			
Connectors type		SC/PC	SC/PC
Porte PON		1000BASE-PX20 (1,25Gbps)	1000BASE-PX20 (1,25Gbps)
Wavelenght	nm	1310 Uplink, 1490 Downlink	1310 Uplink, 1490 Downlink
Optical power	dBm	from +2 to +7 (1310nm)	from +2 to +7 (1310nm)
Optical return loss	dBµV	>45	>45
Optical receiver sensitivity	dBm	up to -28	up to -28
main features			
Supply voltage	Vac, Hz	12	12
Consumption	W	3	3
Operating temperature	°C	0 - +50	0 - +50
Dimensions	mm	110x70x30	160x120x32,5

BOX FIBRA

Serie BOX

CS0E 2U

TDT 12

Item	Code	Description	Dimensions
CS0E 2U	287418	Metal wall box to manage up to 48 optical connection. Suitable fo 48 optical connection	454x152x180
TDT 12	287419	IP 66 plastic box to be used as terminal headend Suitable for 12 SC/APC optical connectors Fibre organizer built in	235x205x60
ST0A 4	287420	Flat termination box 4SC/APC connectors	100x92x29
OPB18I	289403	Wall metal box suitable for 18 optical connections SC/APC 18 SC/APC	365x320x100
OPB8I	289405	Wall metal box suitable for 18 optical connections SC/APC Suitable for 8 SC/APC connections	160x140x50
OPB24IR	289404	Rack mount box for 24 SC/APC optical connections 24 SC/APC	240x43x223
OP012P	289402	12 position Fiber organizer 12 splicing box	150x95x10
TDT 32	287441	IP 66 plastic box to be used as terminal headend	205x135x55
JTDT 32	287442	protection cover for TDT 32	140x80x40
ST0A 2 Preco	287443	Flat termination box with 2 fibre preconnectorized 25mt	255x55x260
ST0A 4 Preco	287440	Flat termination box with 4 fibre preconnectorized 25mt	255x55x260
PMI 24	287444	Metal wall box to manage up to 48 optical connection, completo of 24 pig tail, 2 splicing box Ready for 24 SC/APC optical connection	450x150x150
PMI 48	287445	Metal wall box to manage up to 48 optical connection, completo of 48 pig tail, 4 splicing box Suitable fo 48 optical connection	450x150x150

ST0A 4

OPB8I

OP012P

Multiswitch

Compact Multiswitch

SWI4508DT

4AL828

5IN COMPACT MULTISWITCH

5 inputs compact switches with acticve gain and TV and SAT separate adjustment

- **Active TV (+3dB) and SAT gain (+3dB)**, to guarantee the same level as the input to the output
- **Separate SAT and TV gain adjustment**
- Satellite band up to 2300MHz
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (**70m** with 6,7mm coax.)
- **Satellite signal power monitoring LED** (red LED is on when input level is too low)
- Return path included
- Very low consumption thanks to the internal circuit for automatic remote power supply to the SAT and TV lines
- **External power supply included complete with F connector**; to optimize the installation space and reduce the maintenance time
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation

		SWI4508DT	SWI4512DT	SWI4516DT	SWI4524DT	SWI4532DT
Code		271148	271149	271150	271151	271152
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2400	950-2400	950-2400	950-2400	950-2400
Gain	dB	3	3	3	3	3
Gain adjustment	dB	12	12	12	12	12
Maximum output level (-35dBc 2 toni)	dBµV	102	102	102	102	102
SAT-SAT isolation	dB	>25	>25	>25	>25	>25
TV						
Bandwidth	MHz	85-862	85-862	85-862	85-862	85-862
Gain	dB	3	3	-2	-2	-2
Gain adj.	dB	12	12	12	12	12
Maximum output level (-35dBc 2 toni)	dBµV	97	97	97	97	97
Return channel						
Bandwidth	MHz	5-65	5-65	5-65	5-65	5-65
Gain	dB	-8	-8	-13	-13	-13
Power consumption						
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60	220-240, 50-60	220-240, 50-60
Current cons.	mA, V	400, 12	400, 12	400, 12	400, 12	400, 12
Tap consumption	mA	35	35	35	35	35
Maximum LNB current	mA	600	600	600	600	600
Maximum TV amplifier current	mA	170	170	170	170	170
Main features						
Dimensions	mm	145x120x25	200x120x25	260x120x25	340x120x25	420x120x25
PSU dimensions	mm	145x120x70	145x120x70	145x120x70	145x120x70	145x120x70
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

Multiswitch

Compact Multiswitch

SWP508QD

PSU1220JA

5 INPUTS COMPACT QUAD Serie

5 inputs compact switches with TV and SAT acticve gain and QUAD and quattro LNB compatibility.

- **Active TV (+5dB) and SAT gain (+5dB)**, to guarantee the same level as the input to the output
- Satellite band up to 2300MHz
- **Compatibility with QUAD LNBs (UX-QD LTE)** and QUATTRO (UX-QT LTE) LNBs
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (**70m** with 6,7mm coax.)
- Very low consumption thanks to the internal circuit for automatic remote power supply to the SAT and TV lines
- **Included external Power Supply with standard Jack connector PSU1220JA**; to optimize the installation space and reduce the maintenance time
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation

		SWP508QD	SWP512QD	SWP516QD
Code		271164	271165	271166
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2400	950-2400	950-2400
Gain	dB	5	5	5
Maximum output level (-35dBc 2 toni)	dBµV	102	102	102
SAT-SAT isolation	dB	>25	>25	>25
TV				
Bandwidth	MHz	85-790	85-790	85-790
Gain	dB	5	0	0
Maximum output level (-35dBc 2 toni)	dBµV	95	95	95
Power consumption				
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60
Tap consumption	mA	35	35	35
Without LNB	mA, V	300, 12	300, 12	300, 12
With LNB	mA, V	1000, 12	1000, 12	1000, 12
Maximum LNB current	mA	300	300	300
Maximum TV amplifier current	mA	170	170	170
Main features				
Dimensions	mm	145x120x25	200x120x25	260x120x25
PSU dimensions	mm	78x48x35	78x48x35	78x48x35
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

Compact Multiswitch

SWP916TS

PSU1315TS

9 INPUTS COMPACT Serie

9 inputs compact switches with dip switch to select active and passive TV gain

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (**60m** with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports**; only when TV active is enable, it has to be fed by DC-PLUG
- **Standalone included power supply PSU1315TS** (13V, 1,5A) with standard Male Jack connector (2,1x5,5x12; internal positive, external negative) to optimize the installation space and reduce the maintenance time
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWP908TS	SWP912TS	SWP916TS	SWP924TS	SWP932TS
Code		287350	287351	287352	287353	287354
Inputs		8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-2/2	-3/1	-3/1	-5/-1	-7/-2
Maximum output level (-35dBc 2 toni)	dBµV	100	100	100	100	100
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	1	0	-1	-2	-4
Passive gain	dB	-19	-20	-21	-22	-24
Maximum output level (-35dBc 2 toni)	dBµV	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340
Main features						
Dimensions	mm	110x190x40	170x190x40	170x190x40	230x190x40	300x190x40
PSU dimensions	mm	90x70x45	90x70x45	90x70x45	90x70x45	90x70x45
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

Multiswitch

Compact Multiswitch

SWP1712TS

PSU1340TS

17 INPUT COMPACT Series

17 input multiswitches with active/passive terrestrial path selectable through dip switch.

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (**60m** with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports**; only when TV active is enable, it has to be fed by DC-PLUG
- **External power supply PSU1340TS** (13V, 4A) with male jack connector(2,1x5,5x12; inner positive, outer negative) **inclded**; to optimize the installation dimensions.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWP1708TS	SWP1712TS	SWP1716TS	SWP1724TS	SWP1732TS
Code		287355	287356	287357	287358	287359
Inputs		16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/0	-5/-1	-5/-1	-7/-3	-8/-4
Maximum output level (-35dBc 2 toni)	dBµV	100	100	100	100	100
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	0	-1	-2	-3	-5
Passive gain	dB	-20	-21	-22	-23	-25
Maximum output level (-35dBc 2 toni)	dBµV	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840
Main features						
Dimensions	mm	120x310x40	190x310x40	190x310x40	260x310x40	310x310x40
PSU dimensions	mm	110x52x34	110x52x34	110x52x34	110x52x34	110x52x34
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

MULTISWITCH ACESSORIES

MINI DISEQC Series

With Mini DiSEqC accessories you can distribute up to 4 satellite and terrestrial path (16 polarities) + TV

SW11401B

		SW11401B
Code		271072
Inputs		4 (1 with TV mix)
A Input		SAT, TV
B Input		SAT
C Input		SAT
D Input		SAT
Outputs		1
SAT		
Bandwidth	MHz	950-2150
Insertion loss	dB	-1.5
TV		
Bandwidth	MHz	5-862
Insertion loss	dB	-1.5
Main features		
Current cons.	mA	25
Dimensions	mm	155x55x45
operating temperature	°C	-10÷+55

Multiswitch

CASCADABLE MULTISWITCH

SWI4404-00

4 INPUT CASCADABLE Series

Cascadable multiswitches with 4 input with several attenuation on user taps.

- **3 attenuation levels (-17dB, -8dB, 0dB)** to equalize the distributed signals between floors
- Low insertion loss
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (**70m** with 6,7mm coax.)
- **no power supply required**
- **STBs can feed the LNB also with just one user connected** or the LNB can be feeded through trunk lines.
- Plastic wall mout bracket
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI4404-00	SWI4404-08	SWI4404-17
Code		271081	271082	271083
Inputs		4 SAT	4 SAT	4 SAT
Taps		4 SAT	4 SAT	4 SAT
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	0	-8	-17
Maximum output level (-35dBc 2 toni)	dBµV	105	105	-
Insertion loss	dB	-2	-2	-2
SAT-SAT isolation	dB	>28	>28	>28
Tap consumption	mA	35	35	15
Dimensions	mm	90x70x20	90x70x20	90x70x20
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55
		SWI4406-00	**SWI4406-08**	**SWI4406-17**
Code		271084	271085	271086
Inputs		4 SAT	4 SAT	4 SAT
Taps		6 SAT	6 SAT	6 SAT
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	0	-8	-17
Maximum output level (-35dBc 2 toni)	dBµV	105	105	-
Insertion loss	dB	-2	-2	-2
SAT-SAT isolation	dB	>28	>28	>28
Tap consumption	mA	35	35	15
Dimensions	mm	119x70x20	119x70x20	119x70x20
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55
		SWI4408-00	**SWI4408-08**	**SWI4408-17**
Code		271087	271088	271089
Inputs		4 SAT	4 SAT	4 SAT
Taps		8 SAT	8 SAT	8 SAT
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	0	-8	-17
Maximum output level (-35dBc 2 toni)	dBµV	105	105	-
Insertion loss	dB	-2	-2	-2
SAT-SAT isolation	dB	>28	>28	>28
Tap consumption	mA	35	35	15
Dimensions	mm	150x70x20	150x70x20	150x70x20
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH

SWI504SA

5 INPUT CASCADABLE Series

5 input cascadable multiswitches with passive terrestrial and active adjustable satellite.

- **Active satellite** (1dB) to keep the same input signal level on outputs, **passive TV**
- **Satellite gian adj** (0-20dB) to eaulize the distribution between floors.
- Satellite band up to 2300MHz
- High Isolation (30dB)
- **Low insertion loss**, allow the signal distribution up to 6 floor without any middle amplification.
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (**70m** with 6,7mm coax.)
- Return path included
- **no power supply required**
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI504SA	SWI506SA	SWI508SA
Code		271161	271162	271163
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		4	6	8
SAT				
Bandwidth	MHz	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/1	-4/1	-4/1
Gain adjustment	dB	20	20	20
Insertion loss	dB	-1	-1	-1
SAT-SAT isolation	dB	>30	>30	>30
TV				
Bandwidth	MHz	88-790	88-790	88-790
Gain	dB	-22	-22	-23
Insertion loss	dB	-3	-3	-3
Power consumption				
Tap consumption	mA	160	170	180
Max current on SAT Line	mA	2000	2000	2000
Max current on TV line	mA	1000	1000	1000
Main features				
Dimensions	mm	120x120x30	140x120x30	160x120x30
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

Multiswitch

CASCADABLE MULTISWITCH

SWI8508PLUS

SWM1305A

5 INPUT CASCADABLE PLUS Series

Cascadable 5 inpuit multiswiitches with active SAT and terrestrial and separate adjustment (sat High and low badwidth with separate adj.).

- **TVGain adjustment**
- **2 gain adjutmentfor high band and low band**
- High Isolation (>45dB)
- Low insertion loss
- **High output level** to cover high cable leght (**100m** with 6,7mm coax)
- Return path included
- Low power consumption thanks to automatic check of the satellite remote feeding.
- With Mini DiSEqC accessories you can distribute up to 4 satellite and terrestrial path (16 polarities) + TV
- Standard colour coding for an easy installation

		SWI8508PLUS	SWI8512PLUS	SWI8516PLUS
Code		271055	271056	271063
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Positive slope gain	dB	-5\-1	-4\0	-3\1
Gain adjustment	dB	15	15	15
Maximum output level (-35dBc 2 toni)	dBµV	110	110	108
Insertion loss	dB	-1.5	-2	-2.5
SAT-SAT isolation	dB	>45	>45	>45
TV				
Bandwidth	MHz	85-862	85-862	85-862
Positive slope gain	dB	-5\-1	-7\-3	-9\-5
Gain adj.	dB	20	20	20
Maximum output level (-35dBc 2 toni)	dBµV	107	105	102
Insertion loss	dB	-1	-1.5	-2
Return channel				
Bandwidth	MHz	5-65	5-65	5-65
Gain	dB	-4	-5	-6
Maximum output level (-35dBc 2 toni)	dBµV	100	100	100
Insertion loss	dB	-1	-1	-1
Main features				
Current cons.	mA, V	280, 14 220, 18	280, 14 220, 18	280, 14 220, 18
Dimensions	mm	260x120x30	340x120x30	425x120x30
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH

SWI8524STPLUS

5 INPUT CASCADABLE PLUS Series

5 inputs cascadable multiswitches with active gain and separate adj. on stellite and terrestrial (sat High and low badwidth with separate adj.).

Coupled chassis.

- **TVGain adjustment**
- **2 gain adjutmentfor high band and low band**
- High Isolation (>45dB)
- Low insertion loss
- **High output level** to cover high cable leght (**100m** with 6,7mm coax)
- Return path included
- Low power consumption thanks to automatic check of the satellite remote feeding.
- Standard colour coding for an easy installation

		SWI8524STPLUS	SWI8532STPLUS
Code		271057	271058
Inputs		4 SAT, 1 TV	4 SAT, 1 TV
Taps		24	32
SAT			
Bandwidth	MHz	950-2150	950-2150
Positive slope gain	dB	-6\0	-5\1
Gain adjustment	dB	15	15
Maximum output level (-35dBc 2 toni)	dBµV	110	108
Insertion loss	dB	-4	-5
SAT-SAT isolation	dB	>45	>45
TV			
Bandwidth	MHz	85-862	85-862
Positive slope gain	dB	-9\-3	-11\-5
Gain adj.	dB	20	20
Maximum output level (-35dBc 2 toni)	dBµV	105	102
Insertion loss	dB	-3	-4
Return channel			
Bandwidth	MHz	5-65	5-65
Gain	dB	-5	-6
Maximum output level (-35dBc 2 toni)	dBµV	100	100
Insertion loss	dB	-2	-2
Main features			
Current cons.	mA, V	560, 14 440, 18	560, 14 440, 18
Dimensions	mm	355x120x60	440x120x60
operating temperature	°C	-10÷+55	-10÷+55

Multiswitch

CASCADABLE MULTISWITCH

SWI8908PLUS

9 INPUT CASCADABLE PLUS Series

9 inputs cascadable multiswitches with active gain and separate adj. on stellite and terrestrial (sat High and low badwidth with separate adj.).

- **TVGain adjustment**
- **2 adjustment, one of each satellite**, Satellite A and Satellite B separate
- High Isolation (>45dB)
- Low insertion loss
- **High output level** to cover high cable leght (**100m** with 6,7mm coax)
- Return path included
- Low power consumption thanks to automatic check of the satellite remote feeding.
- Standard colour coding for an easy installation

		SWI8908PLUS	SWI8912PLUS	SWI8916PLUS
Code		271067	271068	271069
Inputs		8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Positive slope gain	dB	-2\3	-3\2	-5\0
Gain adjustment	dB	15	15	15
Maximum output level (-35dBc 2 toni)	dBµV	110	110	108
Insertion loss	dB	-2	-2.5	-3
SAT-SAT isolation	dB	>45	>45	>45
TV				
Bandwidth	MHz	85-862	85-862	85-862
Positive slope gain	dB	-7\-3	-9\-4	-11\-5
Gain adj.	dB	20	20	20
Maximum output level (-35dBc 2 toni)	dBµV	107	105	102
Insertion loss	dB	-1.5	-2	-2.5
Return channel				
Bandwidth	MHz	5-65	5-65	5-65
Gain	dB	-3	-5	-7
Maximum output level (-35dBc 2 toni)	dBµV	100	100	100
Insertion loss	dB	-1.5	-1.5	-1.5
Main features				
Current cons.	mA, V	350, 14 280, 18	350, 14 280, 18	350, 14 280, 18
Dimensions	mm	260x180x30	340x180x30	425x180x30
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH

SWI912TS

PSU1315TS

9 INPUT CASCADABLE Series

9 input multiswitche with dip switch for terrestrial active or passive path.

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (**60m** with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports**; only when TV active is enable, it has to be fed by DC-PLUG
- **external power Supply PSU 315TS** (13V, 1,5A) Jack Male connector (2,1x5,5x12; inner positive, outer negative) **NOT inclued**; to optimize installation dimensiones.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI908TS	SWI912TS	SWI916TS	SWI924TS	SWI932TS
Code		287360	287361	287362	287363	287364
Inputs		8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-2/2	-3/1	-3/1	-5/-1	-6/-2
Maximum output level (-35dBc 2 toni)	dBµV	100	100	100	100	100
Insertion loss	dB	-1\-3	-1\-4	-1\-5	-1.5\-6	-1.5\7.5
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	-2	-3	-4	-5	-6
Passive gain	dB	-22	-23	-24	-25	-26
Maximum output level (-35dBc 2 toni)	dBµV	Active:95	Active:95	Active:95	Active:95	Active:95
Insertion loss	dB	-3\-4	-3\-4.5	-3\-4.5	-3\-4.5	-3\-5
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340
Main features						
Dimensions	mm	110x190x40	170x190x40	170x190x40	230x190x40	300x190x40
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

Multiswitch

CASCADABLE MULTISWITCH

SWI1316TS

PSU1340TS

13 INPUT CASCADABLE Series

13 input multiswitche with dip switch for terrestrial active or passive path.

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (**60m** with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports**; only when TV active is enable, it has to be fed by DC-PLUG
- **external power Supply PSU 1304TS** (13V, 4A) Jack Male connector (2,1x5,5x12; inner positive, outer negative) **NOT inclued**; to optimize installation dimensiones.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI1308TS	SWI1312TS	SWI1316TS
Code		287365	287366	287367
Inputs		12 SAT, 1 TV	12 SAT, 1 TV	12 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/0	-5/-1	-5/-1
Maximum output level (-35dBc 2 toni)	dBµV	100	100	100
Insertion loss	dB	-1\-3	-1\-4	-1\-5
SAT-SAT isolation	dB	>30	>30	>30
TV				
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	-2	-3	-4
Passive gain	dB	-22	-23	-24
Maximum output level (-35dBc 2 toni)	dBµV	Active:95	Active:95	Active:95
Insertion loss	dB	-4\-5	-4\-5	-4\-5
Return channel				
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption				
Tap consumption	mA	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840
Main features				
Dimensions	mm	120x310x40	190x310x40	190x310x40
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH

SWI1716TS

PSU1340TS

17 INPUT CASCADABLE Series

17 input multiswitche with dip switch for terrestrial active or passive path.

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (**60m** with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports**; only when TV active is enable, it has to be fed by DC-PLUG
- **external power Supply PSU 1304TS** (13V, 4A) Jack Male connector (2,1x5,5x12; inner positive, outer negative) **NOT inclued**; to optimize installation dimensiones.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI1708TS	SWI1712TS	SWI1716TS	SWI1724TS	SWI1732TS
Code		287368	287369	287370	287371	287372
Inputs		16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/0	-5/-1	-5/-1	-7/-3	-8/-4
Maximum output level (-35dBc 2 toni)	dBµV	100	100	100	100	100
Insertion loss	dB	-1\-3	-1\-4	-1\-5	-2\-6.5	-2\-8
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	-2	-3	-4	-5	-7
Passive gain	dB	-22	-23	-24	-25	-27
Maximum output level (-35dBc 2 toni)	dBµV	Active:95	Active:95	Active:95	Active:95	Active:95
Insertion loss	dB	-4\-5	-4\-5	-4\-5	-4\-5.5	-4\-6
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840
Main features						
Dimensions	mm	120x310x40	190x310x40	190x310x40	260x310x40	310x310x40
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

Multiswitch

SCD2 (dCSS) MULTISWITCHES

SCD2-4216

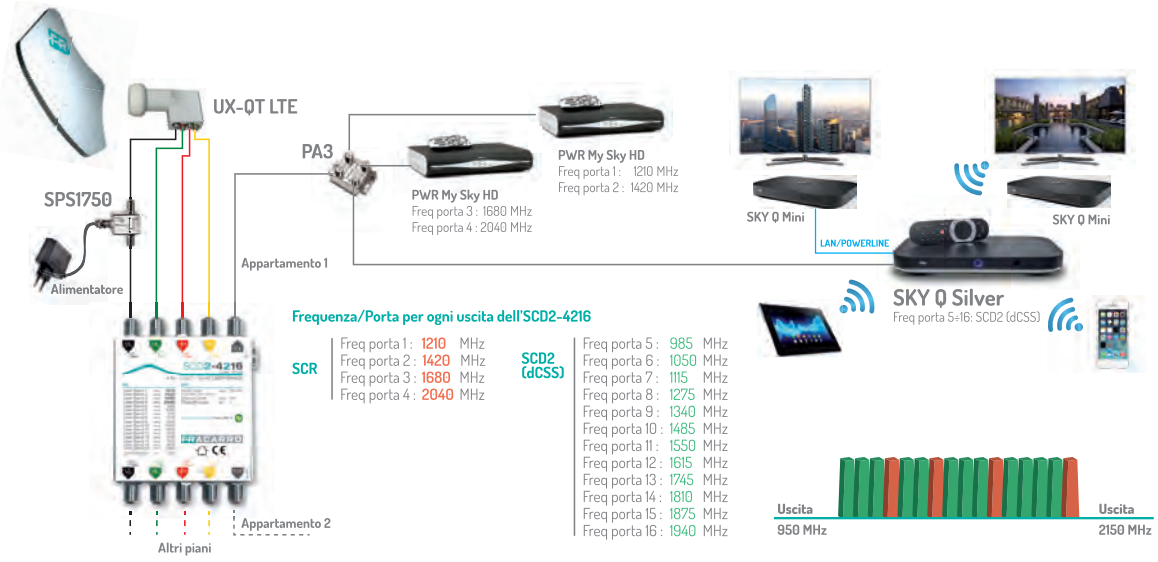
4 INPUT CASCADABLE SCD2 MULTIOUT Series

Cascadable SCD2(dCSS) Swirches , 4 input with AGG and 2 user outputs 16 user band each, fully feeded by STBs.

- **4 Inputs, 4 trunk lines and 2 outputs to carry the signals to 2 final user with 16 user band each with just 2 coaxi** (4 SCR tuners and 12 SCD2 dCSS tuners)
- **Automatic Gain Control (AGC)**: keep stable the signal levels at the outputs (84dBµV) with an input signals from 60dBµV to 90dBµV.
- **Low insertion loss**, perfect to realize cascadable installation or to be installed in an existing multiswitch distribution
- **no power supply required**
- DC Passthrough on all satellite ports
- **Small dimensions**
- Standard colour coding for an easy installation

		SCD2-4216	SCD2-4216UK
Code		271129	271137
Inputs		4 SAT	4 SAT
Taps		up to 32 users SCD2 (dCSS) in 2 coax cables	up to 32 users SCD2 (dCSS) in 2 coax cables
SAT			
Bandwidth	MHz	950-2150	950-2150
Automatic Gain Control	dBµV	60-90	60-90
Maximum output level (-35dBc 2 toni)	dBµV	84	84
Insertion loss	dB	-1	-1
SAT-SAT isolation	dB	>30	>30
Tap			
SCR frequencies	MHz	1210, 1420, 1680, 2040 (comply with EN50494 standard) 985, 1050, 1115, 1275 1340, 1485, 1550, 1615 1745, 1810, 1875, 1840 (comply with EN50607 standard)	980, 1030, 1080, 1130 MHz 1280, 1380, 1480, 1530 MHz 1580, 1630, 1680, 1730 MHz 1780, 1830, 1880, 1930 MHz (comply to SKY UK commands)
Power consumption			
Tap consumption	mA	365	365
Maximum LNB current	mA	2000	2000
Main features			
Dimensions	mm	80x105x22	80x105x22
operating temperature	°C	-10÷+55	-10÷+55

Installation example



SCD2 (dCSS) MULTISWITCHES

SCD2-4416ADP

4 INPUT SCD2 COMPACT ADAPTOR Series

Compact multiswitch ADAPTOR SCD2 (dCSS), 4 inputs with AGC, 2 Legacy tap and 2 tap with 16 user band each, remotely feded from the STBs.

- **4 inputs, 2 Legacy taps and 2 SCD2 (dCSS) taps to carry the satellite signals on 16 User Band on each of the 2 coaxi** (4 SCR tuners and 12 SCD2 dCSS tuners on each outputs)
- **Automatic Gain Control (AGC)**: keep stable the signal levels at the outputs (84dBµV) with an input signals from 65dBµV to 95dBµV.
- #b#perfect to update and existing installation to SCD2 dCSS technology for the new SKY-Q decoder.
- **no power supply required**
- **Small dimensions**
- Standard colour coding for an easy installation

		SCD2-4416ADP	SCD2-4416ADP UK
Code		271169	271168
Inputs		4 SAT+TV, 1 DC	4 SAT+TV, 1 DC
Taps		4 SAT and mixed TV: 2 SCD2 (dCSS) to distribute up to 16 User band SCD/SCD2 on each output and 2 legacy outputs	4 SAT and mixed TV: 2 SCD2 (dCSS) to distribute up to 16 User band SCD/SCD2 on each output and 2 legacy outputs
SAT			
Bandwidth	MHz	950-2150	950-2150
Automatic Gain Control	dBµV	65-95	65-95
Gain	dB	0 (Legacy)	0 (Legacy)
Max input level	dBµV	101 (Legacy)	101 (Legacy)
Maximum output level (-35dBc 2 toni)	dBµV	Legacy: 85, SCR: 85, SCD2 (dCSS): 85	Legacy: 85, SCR: 85, SCD2 (dCSS): 85
SAT-SAT isolation	dB	>25	>25
TV			
Bandwidth	MHz	5-790	5-790
Gain	dB	-2	-2
Max input level	dBµV	110	110
Tap			
SCR frequencies	MHz	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)	980, 1030, 1080, 1130 MHz 1280, 1380, 1480, 1530 MHz 1580, 1630, 1680, 1730 MHz 1780, 1830, 1880, 1930 MHz (comply to SKY UK commands)
Power consumption			
Tap consumption	mA	375@15V	375@15V
Supply voltage	V	12-18 Vdc	12-18 Vdc
Current cons.	mA, V	850@15V	850@15V
Maximum LNB current	mA	300	300
Main features			
Dimensions	mm	120x110x30	120x110x30
operating temperature	°C	-10÷+55	-10÷+55

SCD2 (dCSS) MULTISWITCHES

SCD2-5416

PSU2032 287423

5 INPUT CASCADABLE SCD2 MULTIOUTPUT Series

SCD2 (dCSS) cascadable multiswitch, 5 input with AGC and 4 taps with 16 user band each, feeded by STBs.

- **4 Satellite input and 1 passive TV input, 5 trunk lines with 4 user taps to carry the satellite signals up to 16 user band oneach of the 4 coax** (4 SCR tuners and 12 SCD2 dCSS tuners on each output)
- **Automatic Gain Control (AGC)**: keep stable the signal levels at the outputs (84dBµV) with an input signals from 70dBµV to 100dBµV.
- Low insertion loss
- **Function mode autodetection** in relation to the connected STB teh multiswitchis able to set up to Legacy mode or SCR or SCD2 dCSS without any manual set up.on start up the multiswitch will set to **Legacy** the as son as th DiSEqC has been sent it set to **SCR o SCD2**. the variation can be seen thorugh a LED close to the user output.
- DC Passthrough on all satellite ports
- **no power supply required**
- **PSU2032 as option** (20V 3.2A) with F female connector to feed the LNB, or any eventual head amplifier.

		SCD2-5216W	SCD2-5416	SCD2-5816
Code		287436	287412	287435
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		2 for 2 Legacy users, 8 SCR tuners or 32 SCD2 (dCSS) tuners	4 for 4 Legacy users, 16 SCR tuners or 64 SCD2 (dCSS) tuners	8 for 8 Legacy users, 32 SCR tuners or 128 SCD2 (dCSS) tuners
SAT				
Bandwidth	MHz	290-2340 WideBand	950-2150	950-2150
Automatic Gain Control	dBµV	60-100	70-100	70-100
Maximum output level (-35dBc 2 toni)	dBµV	Legacy: 76, SCR: 84, SCD2 (dCSS): 84	Legacy: 76, SCR: 85, SCD2 (dCSS): 85	Legacy: 76, SCR: 85, SCD2 (dCSS): 85
Insertion loss	dB	-1	-1,5	-2,5
SAT-SAT isolation	dB	>30	>30	>30
TV				
Bandwidth	MHz	5-862	5-1000	5-1000
Gain	dB	-12	-16	-20
Insertion loss	dB	-2,5	-3	-6
Tap				
TV band	MHz	5-862	5-790	5-790
SCR frequencies	MHz	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)
Power consumption				
Tap consumption	mA	350@13V	360@14V / 280@18V	380@14V / 300@18V
Current cons.	mA, V	-	560, 20	560, 20
Maximum LNB current	mA	-	500	500
Main features				
Dimensions	mm	90x90x40	220x140x50	220x220x50
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

SCD2 (dCSS) MULTISWITCHES

SCD2-32IF

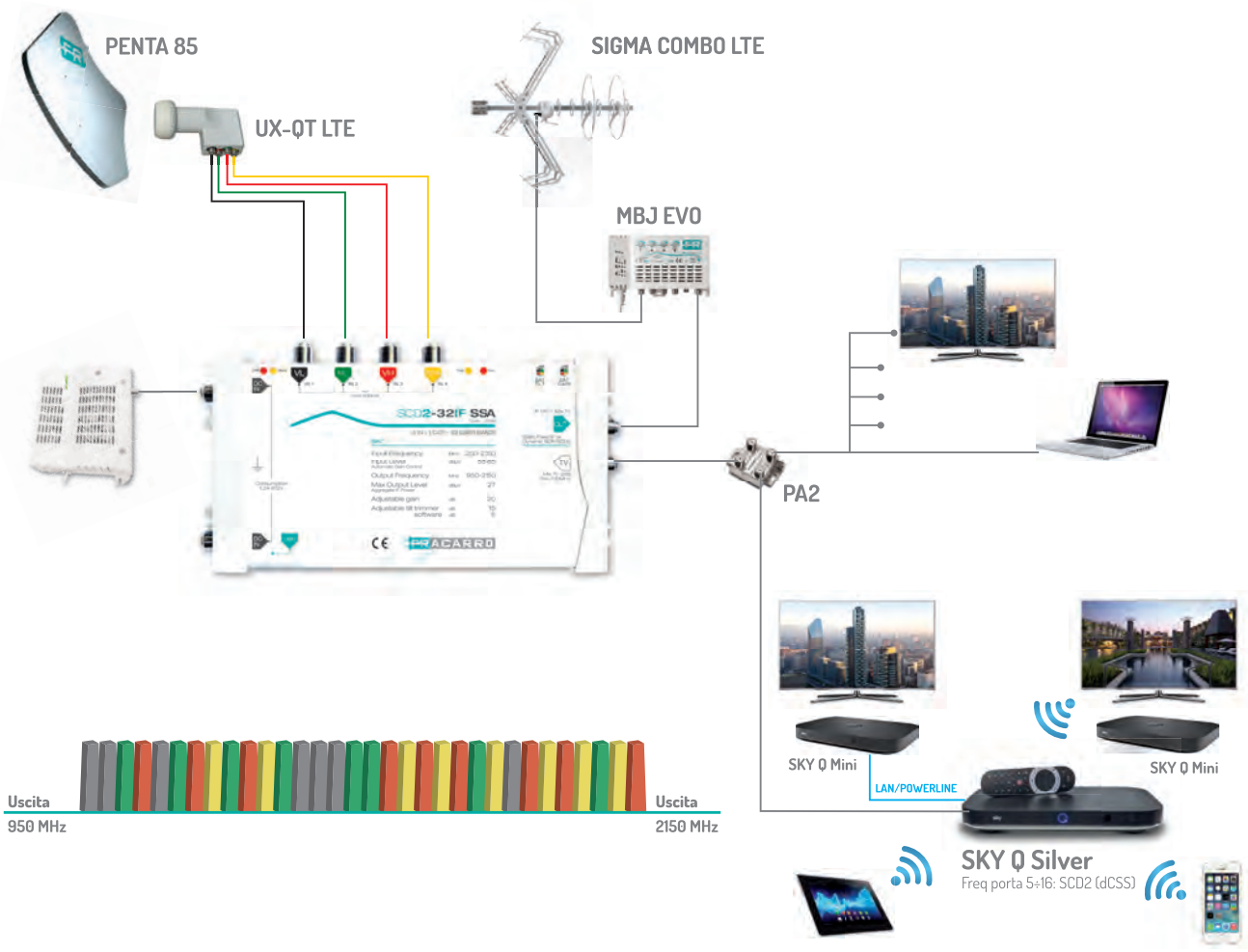
SCD2-32IF SSA

SCD2-32IF Series

SCD2 (dCSS) IF-IF Compact headends with 4 satellite inputs satellite to convert up to 32 DVB-S/S2 transponder (selectable trasponder witdh from 20 to 60MHz).

- **2 models,with or without power amplifier:**
- **SCD2-32IF**: 4 saterllite inputs **2 taps** each trasponder level **86dBuV**; the system can feed far outlet up to **90 m** from the headend.
- **SCD2-32IF SSA**: 4 satellite inputs, **1 passive TV input** and **1 loop through** Satellite output level **128dBuV**; for aoputle far up to **150 mi** from the headend; Gain adj. **20dB** and slope adj.**15dB**
- **Automatic Gain Control (AGC)**: keep stable the signal levels at the outputs (84dBµV) with an input signals from 65dBµV to 85dBµV.
- several satellite can be connected at the input or also **Wide Band LNBs**
- **monitoring LED** USB connection, power status, remote feeding status.
- **isofrequency set up** ; the headend can be use to perfectly equalize the trasponder in one satellite polarity
- **Fixed mode** (IF-IF) or **Dynamic** the headend can work also with DiSEqC commands if connetted to a SCD2 dCSS or SCR STBs
- **Selectable slope** signals can be positive sloped up to 8dB, (SCD2-32IF SSA has also a fixe 15 dB slope) to recvover the cable losses.
- **Double DC connection** for a rendondant feeding.
- Small dimensions
- **PC set up software** thorugh USB easy setup of input/output frequencies, and all the related paramenter as signal levels, slope..

Installation example



Multiswitch

SCD2 (dCSS) MULTISWITCHES

		SCD2-32IF	SCD2-32IF SSA
Code		271130	271138
Inputs		4 SAT	4 SAT, 1 TV
Taps		2 SAT	1 (SAT, TV)
SAT			
Bandwidth	MHz	250-2350	250-2350
Automatic Gain Control	dBµV	55-85	55-85
Gain adjustment	dB	-	20
Slope adj	dB	-	15
Slope adj. per Trasponder	dB	8 (via SW)	8 (via SW)
Max input level	dBµV	97	97
Maximum output level (-35dBc 2 toni)	dBµV	101	127
Max output level (per Trasponder)	dBµV	86	112
Max output level (tone mode)	dBµV	81	107
SAT-SAT isolation	dB	>35	>35
TV			
Bandwidth	MHz	-	114-790
Insertion loss	dB	-	-2
TV-SAT isolation	dB	-	>25
Tap			
Output Trasponder No.		32	32
Operating mode		Static IF-IF / SCR / SCD2 (dCSS)	Static IF-IF / SCR / SCD2 (dCSS)
SAT band	MHz	950-2150	950-2150
Trasponder width	MHz	20-60	20-60
frequency precision	KHz	< 50	< 50
Comunication satandards		DiSEqC-SCIF 1° and 2° generation (SCD / SCD2) SCR (EN50494) e SCD2 (EN50607)	DiSEqC-SCIF 1° and 2° generation (SCD / SCD2) SCR (EN50494) e SCD2 (EN50607)
Power consumption			
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60
Power status LED		Double rendondant DC connector	Double rendondant DC connector
Without LNB	mA, V	400, 12	600, 12
With LNB	mA, V	1100, 12	1200, 12
Max current on SAT Line	mA	601 @12V / 300 @18V (only on QD model)	601 @12V / 300 @18V (only on QD model)
Main features			
Dimensions	mm	160x110x30	200x110x30
PSU dimensions	mm	145x120x70	145x120x70
operating temperature	°C	-10÷+55	-10÷+55

HEAD AMPLIFIERS

AMPLI

AMP9254

AMP9254

Head amplifier **5 input** (4 Satellite and 1 passive TV).

- **Gain** adjustment on each SAT input
- High output level
- Perfect for small and medium installation
- Standard colour coding for an easy installation

AMP9254A

AMP9254A

Head amplifier **5 input** (4 Satellite and 1 passive TV)

- High SAT Gain
- **Gain** and **slope**adjustment on each SAT input
- High output level
- **Auxiliary F connector** to add an external power supply unit on lines 1 and 2
- perfect for big and medium installation
- Standard colour coding for an easy installation

AMP9294

AMP9294

Head amplifier **9 input** (8 Satellite and 1 passive TV).

- **Gain** adjustment on each SAT input
- High output level
- Perfect for small and medium installation
- Standard colour coding for an easy installation

		AMP9254	AMP9254A	AMP9294
Code		271031	271033	271032
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	8 SAT, 1 TV
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	25	32	24
Gain adjustment	dB	15	15	15
Slope adj	dB	-	12	-
Maximum output level (-35dBc 2 toni)	dBµV	112	116	112
TV				
Bandwidth	MHz	5-862	5-862	5-862
Insertion loss	dB	-1	-1	-1
Main features				
Maximum LNB current	mA	400	400	600
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60
Dimensions	mm	235x125x65	235x125x65	320x125x65
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

Multiswitch

Line Amplifiers

LINE AMPLIFIER Series

SWA5414

SWA5414

4 SAT inputs line amplifier

- **Fixed** gain and slope
- It can be fed directly on DC connector or using a PSU with DC inserter on VL port
- Suitable for small and medium systems
- Compact dimensions; excellent quality/price ratio

SWA5424

SWA5424

4 SAT inputs line amplifier

- **Gain and slope** adjustment for each SAT input
- Very High SAT output level
- It can be remotely fed through 1 (VL), 2 (HL) or 3 (VH) SAT lines
- DC pass on HH SAT line
- Suitable for medium and large systems or where there are long distances between multiswitches

SWA5122

SWA5122

2 inputs line amplifier (1 SAT and 1 TV)

- Very high TV gain
- **Gain and slope** adjustment on TV input
- Return channel gain adjustment
- Very high TV output level
- It can be remotely fed through SAT line
- Suitable for medium and large systems or where there are long distances between multiswitches

		SWA5414	SWA5424	SWA5122
Code		271036	271034	271035
Inputs		4 SAT	4 SAT	2 SAT, 1 TV
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	16	25	-1
Slope	dB	4	-	-
Gain adjustment	dB	-	15	-
Slope adj	dB	-	15	-
Maximum output level (-35dBc 2 toni)	dBµV	108	116	-
TV				
Bandwidth	MHz	-	-	5-862
Gain	dB	-	-	30
Gain adj.	dB	-	-	15
Slope adj	dB	-	-	15
Maximum output level (-35dBc 2 toni)	dBµV	-	-	116
Return channel				
Bandwidth	MHz	-	-	5-65
Gain	dB	-	-	15
Gain adj.	dB	-	-	10
Maximum output level (-35dBc 2 toni)	dBµV	-	-	106
Main features				
Supply voltage	V	5-18	14-30	14-30 (on SAT lines)
Current cons.	mA, V	120, 14	300, 14	400, 14
Dimensions	mm	90x90x21	198x108x31	198x108x31
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

Line Amplifiers

LINE AMPLIFIER Series

SWA930TS

SWA930TS

Head amplifier **9 input** (8 Satellite and 1 passive TV)

- High SAT Gain
- TV **Gain** Adj.
- **Active or passive TV** selectable via dip switch
- **Gain** adjustment on each SAT input
- Satellite band up to 2300MHz
- High output level
- **Trunk line power supplyi** or from female **jack connector** (PSU1315TS), every port ha a power status LED.
- Perfect for small and medium installation
- Compact dimensions
- Standard colour coding for an easy installation
- Excellent quality/price ratio

SWA1730TS

SWA1730TS

Head amplifier **17 input** (16 Satellite and 1 passive TV).

- High SAT Gain
- TV **Gain** Adj.
- **Active or passive TV** selectable via dip switch
- **Gain** adjustment on each SAT input
- Satellite band up to 2300MHz
- High output level
- **Trunk line power supplyi** or from female **jack connector** (PSU1340TS), every port ha a power status LED.
- Perfect for small and medium installation
- Compact dimensions
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWA930TS	SWA1730TS
Code		287373	287374
Inputs		8 SAT, 1 TV	16 SAT, 1 TV
SAT			
Bandwidth	MHz	950-2300	950-2300
Gain	dB	30	30
Gain adjustment	dB	20	20
Maximum output level (-35dBc 2 toni)	dBµV	112	112
TV			
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	18	18
Passive gain	dB	-2	-2
Gain adj.	dB	20	20
Maximum output level (-35dBc 2 toni)	dBµV	ActiveTV: 110	ActiveTV: 110
Maximum output level (-35dBc 2 toni)	dBµV	-	-
Main features			
Supply voltage	V	13-14	13-14
Current cons.	mA, V	Passive TV: 1000, 13 ActiveTV:1150, 13	Passive TV: 2000, 13 ActiveTV:2150, 13
Dimensions	mm	170x120x40	290x120x40
operating temperature	°C	-10÷+55	-10÷+55

POWER SUPPLY UINIT

POWER SUPPLY UNIT Series

AMP2000/UK

AMP2000/UK

Power supply unit **14V 2A** with current injector with F connector

- **Removable plug**, available acessories **CVMS-EU** standard European plug.
- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II

PSU3001

PSU3001

Power supply unit **18V 3A** with 2 f connector current injector (max 1,5A each F)

- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II

PSU3001/UK

PSU3001/UK

Power supply unit **18V 3A** with 2 f connector current injector (max 1,5A each F)

- Isolaton class II

		AMP2000/UK	PSU3001	PSU3001/UK
Code		271140	271160	271159
Inputs		1	2	2
Outputs		1	2	2
Bandwidth	MHz	5-2400	5-2400	5-2400
Insertion loss	dB	-1.5	-1.5	-1.5
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60
Power status LED		Uk	Eu	Uk
Isolaton class		II	II	II
Output voltage	V	14	18	18
Max output current	mA	2000	1500x2	1500x2
Output connector		F	F x2	F x2
Output polarity		Inner positive, outter negative	Inner positive, outter negative	Inner positive, outter negative
Dimensions	mm	185x100x60	165x63x107	165x63x107
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

POWER SUPPLY UINIT

POWER SUPPLY UNIT Series

SPS1750

SPS1750

Power supply unit **15V 1A** with f connector current injector

- Low insertion loss
- Wide band TV and Satellite (100MHz - 2400MHz)
- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II
- Compact dimensions

PSU1506

PSU1506

Power supply unit **15V 0.6A** with f connector

- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II
- Compact dimensions

DC-INS

DC-INS

current injector max current 450mA, it can both work with SCR (190mA) or SCD2 dCSS (350mAù)

- Low insertion loss
- Wide band TV and Satellite (100MHz - 2400MHz)
- Low voltage drop
- Compact dimensions

PSU2032

PSU2032

Power supply unit **20V 3.2A** with f connector current injector

- **Removibable plug**, available acessories **CVMS-EU** standard European plug.
- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II
- Compact dimensions

		SPS1750	PSU1506	DC-INS	PSU2032
Code		289087	287155	271126	287423
Inputs		1	-	1 SAT, TV	-
Outputs		1	-	1 SAT, TV	-
Bandwidth	MHz	40-2150	-	100-2400	-
Insertion loss	dB	-1	-	-1	-
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	-	100-240, 50-60
Power status LED		Eu	Eu	-	Eu
Isolaton class		II	II	-	II
Output voltage	V	15	15	-	20
Max output current	mA	1000	600	450	3200
Output connector		F	F	F x3	F
Output polarity		Inner positive, outter negative	Inner positive, outter negative	-	Inner positive, outter negative
Dimensions	mm	40x70x90	46x66x90	48x50x22	140x55x35
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55

POWER SUPPLY UINIT

POWER SUPPLY UNIT Series

PSU1220JA

PSU1220JA

Power supply unit **12V 2A** with male Jack current injector (2,5x5,5x12; inner positive, outer negative)

- **adapter** for Europa, South America, l'Asia (**type C**), UK, Irleland, Malta, Malesia Singapore (**typo G**) USA, Canada, Mexico e japan (**typo A**), Australia, New Zeland, China, Argentina (**typo I**) included
- Isolaton class II
- Compact dimensions
- Excellent quality/price ratio

PSU1315TS

PSU1315TS

Power supply unit **13V 1.5A** with male Jack current injector (2,5x5,5x12; inner positive, outer negative)

- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II
- Compact dimensions

PSU1340TS

PSU1340TS

Power supply unit **13V 4A** with male Jack current injector (2,5x5,5x12; inner positive, outer negative)

- **Removibable plug**, available acessories **CVMS-EU** standard European plug.
- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II
- Compact dimensions

		PSU1220JA	PSU1315TS	PSU1340TS
Code		287405	287375	287376
Supply voltage	V, Hz	100-240, 50-60	220-240, 50-60	220-240, 50-60
Power status LED		with adapters	Eu	Eu
Isolaton class		II	II	II
Output voltage	V	12	13	13
Max output current	mA	2000	1500	4000
Output connector		M-Type Jack 2.5x5,5x12	M-Type Jack 2.1x5,5x12	M-Type Jack 2.1x5,5x12
Output polarity		Inner positive, outter negative	Inner positive, outter negative	Inner positive, outter negative
Dimensions	mm	78x48x35	90x70x45	110x52x34
operating temperature	°C	0÷45	0÷40	0÷40

MULTISWITCH ACESSORIES

TAPS AND SPLITTER Series

CATIVE Taps and splitter for the multiswqitch line

SWI85SPL2

SWI85T15

		SWI85SPL2	SWI85T15
Code		271096	271095
Inputs		4 SAT, 1 TV, 1 DC	4 SAT, 1 TV
Outputs		4 SAT, 1 TV	4 SAT, 1 TV
Taps		4 SAT, 1 TV	4 SAT, 1 TV, 1 DC
SAT			
Bandwidth	MHz	950-2150	950-2150
Insertion loss	dB	-4.5	-2
Tap loss	dB	-	-13
SAT-SAT isolation	dB	≥30	≥30
TV			
Bandwidth	MHz	5-862	5-862
Insertion loss	dB	-4.5	-2
Tap loss	dB	-	-13
Main features			
Dimensions	mm	160x118x30	160x118x30
operating temperature	°C	-10÷+55	-10÷+55

MULTISWITCH ACESSORIES

MULTISWITCH ACCESSORIES Series

Connector for multiswitches

Item	Code	Description	Pcs
PC8338	287398	UK to Eu converter	1
SCP3	287399	SCHUKO to UK converter	1
FEB	287203	F compression connector for single earth bound	1

PC8338

SCP3

FEB

Distribution

CLAMP

PAM SPLITTER Series

PAM clamp splitter for SAT and TV band (**5-2400MHz**)
thanks to the **fixing harpin**, the coax inner is tight fixed on the clamp, to easy fix the cables.
very small die cast housing combined with clamps decrease the required installation dimension .
excellent shielding assure the protection to any eventual unwanted signal.

PA2M

Item		PA2M	PA3M	PA4M	PA5M
Code		287456	287457	287458	287459
Outputs		2	3	4	5
Insertion loss (dB)	RC 5-40 MHz	4	6,6	8,1	10,6
	TV 47-862 MHz	4,3	7,2	8,7	11,2
	SAT 950-1750 MHz	5,1	8,1	9,6	12,7
	SAT 1750-2150 MHz	5,8	8,5	10,5	13,5
	SAT 2150-2400 MHz	6,8	10,5	11,5	16,5
Outputs isolation(dB)	RC 5-40 MHz	21	21	21	21
	TV 47-862 MHz	21	21	21	21
	SAT 950-1750 MHz	21	21	21	21
	SAT 1750-2150 MHz	21	21	21	21
	SAT 2150-2400 MHz	20	20	20	20

DEM TAPS Series

DEM clamp tap for SAT and TV band (**5-2400MHz**)
thanks to the **fixing harpin**, the coax inner is tight fixed on the clamp, to easy fix the cables.
very small die cast housing combined with clamps decrease the required installation dimension .
excellent shielding assure the protection to any eventual unwanted signal.

DE122M

Item		DE110M	DE114M	DE118M	DE122M	DE210M	DE214M
Code		287460	287461	287462	287463	287464	287465
Insertion loss (dB)	RC 5-40 MHz	1,6	1,2	1	1	3,5	2
	TV 47-862 MHz	1,7	1,3	1,1	1,1	3,5	2,4
	SAT 950-1750 MHz	2	1,8	1,3	1,3	4,5	3
	SAT 1750-2150 MHz	2,5	2	1,5	1,5	5	3,2
	SAT 2150-2400 MHz	3	2,8	2,2	2,2	5,5	3,5
Outputs isolation(dB)	RC 5-40 MHz	20	20	20	20	20	20
	TV 47-862 MHz	20	20	20	20	20	20
	SAT 950-1750 MHz	20	20	20	20	20	20
	SAT 1750-2150 MHz	20	20	20	20	20	20
	SAT 2150-2400 MHz	20	20	20	20	20	20

Item		DE218M	DE222M	DE412M	DE414M	DE418M	DE422M
Code		287466	287467	287468	287469	287470	287471
Insertion loss (dB)	RC 5-40 MHz	1,5	1	4,2	2	2	1
	TV 47-862 MHz	1,7	1,3	4,3	2,2	2,2	1,5
	SAT 950-1750 MHz	2,1	2	4,5	3	3	1,6
	SAT 1750-2150 MHz	2,2	2,2	5	3,2	3,2	1,8
	SAT 2150-2400 MHz	2,5	2,4	5,5	3,5	3,5	2
Outputs isolation(dB)	RC 5-40 MHz	20	20	20	20	20	20
	TV 47-862 MHz	20	20	20	20	20	20
	SAT 950-1750 MHz	20	20	20	20	20	20
	SAT 1750-2150 MHz	20	20	20	20	20	20
	SAT 2150-2400 MHz	20	20	20	20	20	20

CLAMP

CAD S SPLITTER Series

CAD S clamp splitter for SAT and TV band (**5-2400MHz**)

- Excellent **class A shielding** and a perfect 75 ohm impedance.
- **each cable has his own clamp** for a wide band distribution also with different cables dimensions.
- Operating functions are **patented by Fracarro** to realise a quick and easy installation.

PP2

PP4

Item		PP2	PP3	PP4	PP5
Code		220802	220803	220804	220805
Outputs		2	3	4	5
Insertion loss (dB)	RC 5-40 MHz	4	6,5	9,5	11
	TV 47-862 MHz	4	6,5	9,5	11
	SAT 950-1750 MHz	4,5	6,5	10	11,5
	SAT 1750-2150 MHz	5	7	10,5	12
	SAT 2150-2400 MHz	5,5	8	11	13
Outputs isolation(dB)	RC 5-40 MHz	25	20	20	20
	TV 47-862 MHz	22	20	25	25
	SAT 950-1750 MHz	20	20	25	25
	SAT 1750-2150 MHz	20	20	20	22
	SAT 2150-2400 MHz	18	18	18	18

Item		CD1-10	CD1-14	CD1-18	CD1-22
Code		220810	220814	220818	220822
Taps		1	1	1	1
Insertion loss (dB)	RC 5-40 MHz	1,8	0,8	0,8	0,8
	TV 47-862 MHz	1,6	0,8	0,8	0,8
	SAT 950-1750 MHz	2	1,3	1,3	1,3
	SAT 1750-2150 MHz	2,3	1,5	1,5	1,5
	SAT 2150-2400 MHz	2,6	2	2	2
Tap loss (dB)	RC 5-40 MHz	10	14,5	18	22
	TV 47-862 MHz	10	14,5	18	22
	SAT 950-1750 MHz	10	14,5	17,5	21,5
	SAT 1750-2150 MHz	10	14,5	18	22
	SAT 2150-2400 MHz	10	14	18	22
Outputs isolation(dB)	RC 5-40 MHz	28	30	32	36
	TV 47-862 MHz	30	33	35	40
	SAT 950-1750 MHz	30	25	30	35
	SAT 1750-2150 MHz	28	25	27	30
	SAT 2150-2400 MHz	32	24	24	27

Item		CD2-10	CD2-14	CD2-18	CD2-22
Code		220830	220834	220838	220842
Taps		2	2	2	2
Insertion loss (dB)	RC 5-40 MHz	3,5	1,6	1,6	1,6
	TV 47-862 MHz	3	1,5	1,5	1,5
	SAT 950-1750 MHz	3,3	2,5	2,5	2,5
	SAT 1750-2150 MHz	4,2	2,7	2,7	2,7
	SAT 2150-2400 MHz	4,7	3,5	3,5	3,5
Tap loss (dB)	RC 5-40 MHz	11	15	18	22
	TV 47-862 MHz	10	15	18	22
	SAT 950-1750 MHz	10,5	14,5	18	22
	SAT 1750-2150 MHz	10,5	14,5	18	22
	SAT 2150-2400 MHz	11	14,5	18	22
Outputs isolation(dB)	RC 5-40 MHz	25	30	32	35
	TV 47-862 MHz	28	35	37	40
	SAT 950-1750 MHz	23	25	28	32
	SAT 1750-2150 MHz	20	23	26	30
	SAT 2150-2400 MHz	18	23	26	30

CLAMP

CD4-12

Item		CD4-12	CD4-14	CD4-18
Code		220852	220854	220858
Taps		4	4	4
Insertion loss (dB)	RC 5-40 MHz	4	3,5	1,6
	TV 47-862 MHz	3,7	3,3	1,5
	SAT 950-1750 MHz	4,5	3,7	2,5
	SAT 1750-2150 MHz	5,5	4,5	3,5
	SAT 2150-2400 MHz	6,5	5	4
Tap loss (dB)	RC 5-40 MHz	13	14	19
	TV 47-862 MHz	12	14	18
	SAT 950-1750 MHz	12	14,5	18
	SAT 1750-2150 MHz	12,5	14,5	18
	SAT 2150-2400 MHz	13	14,5	18
Outputs isolation(dB)	RC 5-40 MHz	27	30	33
	TV 47-862 MHz	27	30	35
	SAT 950-1750 MHz	27	30	33
	SAT 1750-2150 MHz	25	25	30
	SAT 2150-2400 MHz	25	25	25

CLAMP

SI Series

CAD S clamp splitter for SAT and TV band (**5-2400MHz**) with indoor plastic housing

- the family is composed by PP2, PP3 o PP4 mounted on BIC plastic housing to easy realise the wallmount
- Excellent **class A shielding** and a perfect 75 ohm impedance.
- **each cable has his own clamp** for a wide band distribution also with different cables dimensions.
- Operating functions are **patented by Fracarro** to realise a quick and easy installation.

Item	Code	Description	Pcs
SI2	220872	CAD S 2 way splitter up to 2400MHz with plastic housing (PP2+BIC)	1
SI3	220873	CAD S 3 way splitter up to 2400MHz with plastic housing (PP2+BIC)	1
SI4	220874	CAD S 4 way splitter up to 2400MHz with plastic housing (PP2+BIC)	1

Item	Code	Description	Pcs
BIC	220800	CAD S Indoor plastic housing	20
BOC	220801	CAD S outdoor plastic housing	1
ARD	220891	CAD S din rail mounting	10

CAD S ACESSORIES Series

CAD S indoor and outdoor box

SI2

BIC

BOC

ARD

Distribution

CLAMP

CAD SPLITTER Series

Clamp splitter for TV band (**47-862MHz**)

- **Metal frame housing** with shielded screw clam connector
- To realise a good installatio we suggest the use of both Slitter and Taps
- **1 input and 2, 3 o 4 outputs**
- V.S.W.R. <1.2.

PP12

Item		PP12	PP13	PP14
Code		220370	220376	220390
Outputs	No.	2	3	4
Insertion loss	dB	4	6	7
Isolation B1	dB	18	15	10
Isolation B3	dB	18	15	10
Isolation B4	dB	18	15	10
Isolation B5	dB	18	15	10

Item		PP12DC	PP14DC	IP2
Code		220375	220392	220322
Outputs	No.	2	4	2
Insertion loss	dB	4	8	4
Isolation B1	dB	18	10	18
Isolation B3	dB	18	10	18
Isolation B4	dB	18	10	18
Isolation B5	dB	18	10	18

CLAMP

CAD TAPS Series

Resistive clamp taps for TV band (**47-862MHz**)

- **Metal frame housing** with shielded screw clam connector
- To realise a good installatio we suggest the use of both Slitter and Taps
- Taps can be installed on trunk lines or as tap on end of the line using a 75 ohm load
- **1 input, 1 trunk line and 1, 2 o 4 output taps.**

Item			CD11	CD12
Code			220660	220670
Taps		No.	1	2
Insertion loss		dB	0.8/1.1	1.3/1.8
Isolation Tap output	47-68MHz	dB	10	11
	174-230MHz	dB	10	11
	470-606MHz	dB	10	10
	606-862MHz	dB	10	10
	47-68MHz	dB	-	21
	174-230MHz	dB	-	21
	470-606MHz	dB	-	19
	606-862MHz	dB	-	19
Input V.S.W.R.			<1.2	<1.4

CLAMP

CAD DIRECTIONAL TAPS Series

clamp Inductive taps for TV band (**47-862MHz**)

- **Metal frame housing** with shielded screw clam connector
- High isolation between outputs and sloped frequency response to compensate the cable loss.
- **1 input, 1 output trunk line and 1, 2, 3 o 4 output taps.**

CAD11

Item			CAD11	CAD12	CAD13	CAD14
Code			220451	220452	220453	220454
Taps		No.	1	2	3	4
Insertion loss		dB	0.1/0.7	0.1/0.8	0.2/2	0.1/1.9
Isolation Tap output	47-68MHz	dB	27	27	27	27
	174-230MHz	dB	17	18	17	17
	470-606MHz	dB	11	12	12	12
	606-862MHz	dB	12	13	15	15
	47-68MHz	dB	45	53	40/44	48/60
	174-230MHz	dB	38	43	35/30	37/60
	470-606MHz	dB	36	30	34/25	29/52
	606-862MHz	dB	35	26	32/35	25/45
Input V.S.W.R.			<1.1	<1.2	<1.3	<1.2

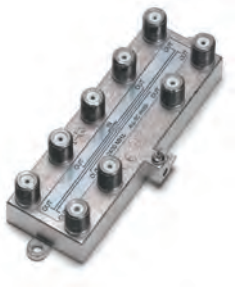
F CONNECTORS

PA Vertical splitter Series

F connector **vertical splitter** for TV and Satellite band (**5-2400MHz**)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses , high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between outputs to input.**

PA2



PA8

Item		PA2	PA3	PA4
Code		280701	280703	280702
Outputs		2	3	4
Insertion loss (dB)	RC 5-40 MHz	4	7	7,5
	TV 47-862 MHz	4	8	8,5
	SAT 950-1750 MHz	5,5	10	11
	SAT 1750-2150 MHz	5,5	10,5	11,5
	SAT 2150-2400 MHz	6	11	12
Outputs isolation(dB)	RC 5-40 MHz	22	22	30
	TV 47-862 MHz	21	22	28
	SAT 950-1750 MHz	20	22	26
	SAT 1750-2150 MHz	20	22	22
	SAT 2150-2400 MHz	23	22	22

Item		PA6	PA8
Code		280704	280705
Outputs		6	8
Insertion loss (dB)	RC 5-40 MHz	10,5	12
	TV 47-862 MHz	11	12,5
	SAT 950-1750 MHz	13,5	15,5
	SAT 1750-2150 MHz	14,5	16,5
	SAT 2150-2400 MHz	16	17
Outputs isolation(dB)	RC 5-40 MHz	22	20
	TV 47-862 MHz	22	20
	SAT 950-1750 MHz	22	20
	SAT 1750-2150 MHz	22	20
	SAT 2150-2400 MHz	22	20

F CONNECTORS

DE Series

F connector **vertical taps** for TV and Satellite band (**5-2400MHz**)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses , high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**

DE1-10

Item		DE1-10	DE1-14	DE1-18	DE1-22
Code		280710	280711	280712	280713
Taps		1	1	1	1
Insertion loss (dB)	RC 5-40 MHz	1,5	1	0,8	0,6
	TV 47-862 MHz	1,3	0,8	0,7	0,5
	SAT 950-1750 MHz	1,6	1,2	0,9	0,8
	SAT 1750-2150 MHz	2	1,3	1	1
	SAT 2150-2400 MHz	2	1,5	1,3	1,7
Tap loss (dB)	RC 5-40 MHz	10,5	14	18,5	22
	TV 47-862 MHz	10,5	14	18,5	22
	SAT 950-1750 MHz	11	14	18,5	22
	SAT 1750-2150 MHz	11	14	18,5	22
	SAT 2150-2400 MHz	11	14	18,5	22
Outputs isolation(dB)	RC 5-40 MHz	40	32	45	50
	TV 47-862 MHz	34	29	34	36
	SAT 950-1750 MHz	27	28	31	33
	SAT 1750-2150 MHz	24	30	27	31
	SAT 2150-2400 MHz	24	25	22	27

F CONNECTORS

DE vertical taps Series

F connector **vertical taps** for TV and Satellite band (**5-2400MHz**)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses , high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**

DE2-10

DE4-12

DE4-18

DE4-22

Item		DE2-10	DE2-14	DE2-18	DE2-22
Code		280714	280715	280716	280717
Taps		2	2	2	2
Insertion loss (dB)	RC 5-40 MHz	2,5	1,5	1,2	1,2
	TV 47-862 MHz	2,5	1,5	1,2	1,1
	SAT 950-1750 MHz	2,5	1,8	1,5	1,5
	SAT 1750-2150 MHz	2,8	2	1,8	1,8
	SAT 2150-2400 MHz	3,5	2,2	2	2,2
Tap loss (dB)	RC 5-40 MHz	10	14	18	22
	TV 47-862 MHz	10	14	18	22
	SAT 950-1750 MHz	10	14	18	22
	SAT 1750-2150 MHz	10	11	18	22
	SAT 2150-2400 MHz	10	11,5	19	22
Outputs isolation(dB)	RC 5-40 MHz	25	35	45	45
	TV 47-862 MHz	28	27	33	38
	SAT 950-1750 MHz	25	25	27	31
	SAT 1750-2150 MHz	25	23	27	27
	SAT 2150-2400 MHz	23	23	25	27

Item		DE4-12	DE4-14	DE4-18	DE4-22
Code		280718	280719	280720	280721
Taps		4	4	4	4
Insertion loss (dB)	RC 5-40 MHz	3,5	2,5	1,5	1
	TV 47-862 MHz	3,9	2,4	1,3	1
	SAT 950-1750 MHz	5,1	3	1,5	1,2
	SAT 1750-2150 MHz	5,2	3,5	1,8	1,5
	SAT 2150-2400 MHz	5,4	4	2	1,5
Tap loss (dB)	RC 5-40 MHz	11,5	14,5	18	21,5
	TV 47-862 MHz	11,5	13,8	18	21,8
	SAT 950-1750 MHz	13	14	18,5	22,5
	SAT 1750-2150 MHz	14	14,5	19	23
	SAT 2150-2400 MHz	15,5	15	19	24
Outputs isolation(dB)	RC 5-40 MHz	35	32	45	38
	TV 47-862 MHz	33	34	45	35
	SAT 950-1750 MHz	28	30	35	31
	SAT 1750-2150 MHz	28	27	30	27
	SAT 2150-2400 MHz	28	30	30	26

F CONNECTORS

DE vertical taps Series

F connector **vertical taps** for TV and Satellite band (**5-2400MHz**)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses , high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**

DE6-16

DE8-20

Item		DE6-16	DE6-20	DE8-16	DE8-20
Code		280722	280723	280725	280726
Taps		6	6	8	8
Insertion loss (dB)	RC 5-40 MHz	4,5	2,5	4,5	2,5
	TV 47-862 MHz	5	3	5	3
	SAT 950-1750 MHz	5,5	4	5,5	4,5
	SAT 1750-2150 MHz	5,5	4,5	5,5	5
	SAT 2150-2400 MHz	5,5	5,5	5,5	5,5
Tap loss (dB)	RC 5-40 MHz	14	19	14	19
	TV 47-862 MHz	14	19	15	19
	SAT 950-1750 MHz	15	19,5	16,5	19
	SAT 1750-2150 MHz	16,5	20	18	19
	SAT 2150-2400 MHz	18	20	19,5	20
Outputs isolation(dB)	RC 5-40 MHz	25	30	30	30
	TV 47-862 MHz	22	24	25	23
	SAT 950-1750 MHz	22	22	25	20
	SAT 1750-2150 MHz	22	22	25	20
	SAT 2150-2400 MHz	22	22	25	20

F CONNECTORS

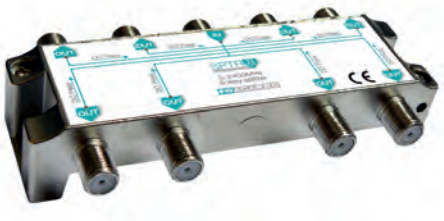
SPTR horizontal splitter Series

F connector **"top-down" horizontal splitter** for TV e Satellite band (**5-2400MHz**)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses , high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between outputs to input.**

Item		SPTR2	SPTR3	SPTR4	SPTR6	SPTR8
Code		287305	287307	287306	287308	287309
Outputs		2	3	4	6	8
Insertion loss (dB)	RC 5-40 MHz	3,5	7	6	10	11
	TV 47-862 MHz	4	8	7	11	12,5
	SAT 950-1750 MHz	4	8	7	11,5	12,5
	SAT 1750-2150 MHz	5	9,5	9	14,5	15,5
	SAT 2150-2400 MHz	5.5	10	9,5	16	16
Outputs isolation(dB)	RC 5-40 MHz	27,5	20	25	27,5	27,5
	TV 47-862 MHz	20	20	20	25	25
	SAT 950-1750 MHz	20	20	20	25	25
	SAT 1750-2150 MHz	18	18	20	25	25
	SAT 2150-2400 MHz	18	18	18	25	25

SPTR2



SPTR8

F CONNECTORS

TAPS horizontal Series

F connector **"top-down" horizontal taps** for TV e Satellite band (**5-2400MHz**)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses , high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**

TAPS110

TAPS212

Item		TAPS110	TAPS115	TAPS120
Code		287310	287311	287312
Taps		1	1	1
Insertion loss (dB)	RC 5-40 MHz	2	1.5	1
	TV 47-862 MHz	2	1.5	1
	SAT 950-1750 MHz	2.5	2	1.5
	SAT 1750-2150 MHz	3	2.5	2
	SAT 2150-2400 MHz	3.5	3	2.5
Tap loss (dB)	RC 5-40 MHz	10	15	20
	TV 47-862 MHz	10	15	20
	SAT 950-1750 MHz	10	15	20
	SAT 1750-2150 MHz	10	15	20
	SAT 2150-2400 MHz	10	15	20
Outputs isolation(dB)	RC 5-40 MHz	28	35	39
	TV 47-862 MHz	24	26	29
	SAT 950-1750 MHz	23	25	25
	SAT 1750-2150 MHz	22	23	25
	SAT 2150-2400 MHz	22	23	25

Item		TAPS212	TAPS215	TAPS220
Code		287313	287314	287315
Taps		2	2	2
Insertion loss (dB)	RC 5-40 MHz	3	2	1.5
	TV 47-862 MHz	3	2.5	2
	SAT 950-1750 MHz	3.5	3.5	3
	SAT 1750-2150 MHz	4	3.5	3
	SAT 2150-2400 MHz	5	4	4
Tap loss (dB)	RC 5-40 MHz	12	15	20
	TV 47-862 MHz	12	15	20
	SAT 950-1750 MHz	12	15	20
	SAT 1750-2150 MHz	12	15	20
	SAT 2150-2400 MHz	12	15	20
Outputs isolation(dB)	RC 5-40 MHz	25	30	33
	TV 47-862 MHz	25	30	30
	SAT 950-1750 MHz	25	27	28
	SAT 1750-2150 MHz	22	25	28
	SAT 2150-2400 MHz	21	25	25

F CONNECTORS

TAPS horizontal Series

F connector **"top-down" horizontal taps** for TV e Satellite band (**5-2400MHz**)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses , high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**

TAPS420

TAPS620

Item		TAPS412	TAPS415	TAPS420
Code		287316	287317	287318
Taps		4	4	4
Insertion loss (dB)	RC 5-40 MHz	2.5	2.5	2
	TV 47-862 MHz	3	2.5	2
	SAT 950-1750 MHz	3	2.5	2
	SAT 1750-2150 MHz	3.5	3	3
	SAT 2150-2400 MHz	4	4	3.5
Tap loss (dB)	RC 5-40 MHz	12	15	20
	TV 47-862 MHz	12	15	20
	SAT 950-1750 MHz	12	15	20
	SAT 1750-2150 MHz	12	15	20
	SAT 2150-2400 MHz	12	15	20
Outputs isolation(dB)	RC 5-40 MHz	28	30	33
	TV 47-862 MHz	24	25	28
	SAT 950-1750 MHz	23	24	26
	SAT 1750-2150 MHz	22	23	24
	SAT 2150-2400 MHz	22	22	23

Item		TAPS616	TAPS620
Code		287319	287320
Taps		6	6
Insertion loss (dB)	RC 5-40 MHz	4	2.5
	TV 47-862 MHz	4.5	2.5
	SAT 950-1750 MHz	5	3
	SAT 1750-2150 MHz	5.5	4.5
	SAT 2150-2400 MHz	7	5.5
Tap loss (dB)	RC 5-40 MHz	16	20
	TV 47-862 MHz	16	20
	SAT 950-1750 MHz	16	20
	SAT 1750-2150 MHz	16	20
	SAT 2150-2400 MHz	16	20
Outputs isolation(dB)	RC 5-40 MHz	25	24
	TV 47-862 MHz	25	24
	SAT 950-1750 MHz	24	24
	SAT 1750-2150 MHz	22	22
	SAT 2150-2400 MHz	21	21

Distribution

F CONNECTORS

TAPS816

TAPS820

Item		TAPS816	TAPS820
Code		287321	287322
Taps		8	8
Insertion loss (dB)	RC 5-40 MHz	4.5	2.5
	TV 47-862 MHz	5	3
	SAT 950-1750 MHz	5.5	3
	SAT 1750-2150 MHz	5.5	4.5
	SAT 2150-2400 MHz	7	5.5
Tap loss (dB)	RC 5-40 MHz	16	20
	TV 47-862 MHz	16	20
	SAT 950-1750 MHz	16	20
	SAT 1750-2150 MHz	16	20
	SAT 2150-2400 MHz	16	20
Outputs isolation(dB)	RC 5-40 MHz	23	24
	TV 47-862 MHz	23	23
	SAT 950-1750 MHz	22	23
	SAT 1750-2150 MHz	21	22
	SAT 2150-2400 MHz	20	21

TV-SAT WALLOUTLET

SPI and IEC walloutlet Series

single outlet with 1 output male IEC connector for TV e Satellite band (**5-2400MHz**)

- The outlet is designed with an innovative system to connect to coaxial cable. It enables the user to connect to a cable with a diameter between 5 and 7mm.
- Fully shielded (**class A**)
- **plastic adapter** for all the brands available on the market
- Comply to EN50083-4

SPI00

SPI22

Item		SPI00	SPI05	SPI10
Code		220711	220712	220713
Insertion loss (dB)	RC 5-40 MHz	-	5	2.5
	TV 47-862 MHz	-	5	2.5
	SAT 950-1750 MHz	-	7	3
	SAT 1750-2150 MHz	-	7	3
	SAT 2150-2400 MHz	-	8	3.2
Tap loss (dB)	RC 5-40 MHz	0.5	5	10.5
	TV 47-862 MHz	0.5	5	10
	SAT 950-1750 MHz	0.8	7	10.5
	SAT 1750-2150 MHz	0.8	7	10.5
	SAT 2150-2400 MHz	0.8	8	11
Outlet type		Terminal outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male	IEC male	IEC male

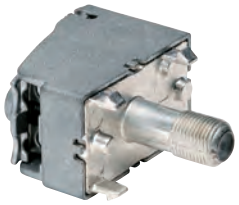
Item		SPI14	SPI18	SPI22
Code		220714	220715	220716
Insertion loss (dB)	RC 5-40 MHz	1.5	1.5	1.5
	TV 47-862 MHz	1.2	1.2	1.2
	SAT 950-1750 MHz	2.2	2.2	2.2
	SAT 1750-2150 MHz	2.2	2.2	2.2
	SAT 2150-2400 MHz	2.5	2.5	2.5
Tap loss (dB)	RC 5-40 MHz	15	18.5	22.5
	TV 47-862 MHz	14.5	18	22
	SAT 950-1750 MHz	14.5	18	22
	SAT 1750-2150 MHz	14.5	18	22
	SAT 2150-2400 MHz	15	18.5	22.5
Outlet type		Passthrough outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male	IEC male	IEC male

TV-SAT WALLOUTLET

SPF F outlet Series

single outlet with 1 output male F connector for TV e Satellite band (**5-2400MHz**)

- The outlet is designed with an innovative system to connect to coaxial cable. It enables the user to connect to a cable with a diameter between 5 and 7mm.
- Fully shielded (**class A**)
- **plastic adapter** for all the brands available on the market
- Comply to EN50083-4



SPF00

SPF22

Item		SPF00	SPF05	SPF10
Code		220721	220722	220723
Insertion loss (dB)	RC 5-40 MHz	-	5	2.5
	TV 47-862 MHz	-	5	2.5
	SAT 950-1750 MHz	-	7	3
	SAT 1750-2150 MHz	-	7	3
	SAT 2150-2400 MHz	-	8	3.2
Tap loss (dB)	RC 5-40 MHz	0.5	5	10.5
	TV 47-862 MHz	0.5	5	10
	SAT 950-1750 MHz	0.8	7	10.5
	SAT 1750-2150 MHz	0.8	7	10.5
	SAT 2150-2400 MHz	0.8	8	11
Outlet type		Terminal outlet	Passthrough outlet	Passthrough outlet
Connector		F female	F female	F female

Item		SPF14	SPF18	SPF22
Code		220724	220725	220726
Insertion loss (dB)	RC 5-40 MHz	1.5	1.5	1.5
	TV 47-862 MHz	1.2	1.2	1.2
	SAT 950-1750 MHz	2.2	2.2	2.2
	SAT 1750-2150 MHz	2.2	2.2	2.2
	SAT 2150-2400 MHz	2.5	2.5	2.5
Tap loss (dB)	RC 5-40 MHz	15	18.5	22.5
	TV 47-862 MHz	14.5	18	22
	SAT 950-1750 MHz	14.5	18	22
	SAT 1750-2150 MHz	14.5	18	22
	SAT 2150-2400 MHz	15	18.5	22.5
Outlet type		Passthrough outlet	Passthrough outlet	Passthrough outlet
Connector		F female	F female	F female

TV-SAT WALLOUTLET

PDM demix outlet Series

single outlet with 2 output IEC connector for TV (47-862MHz) and F connector for Satellite band (**950-2400MHz**)

- The outlet demix SAT and TV combined in a single input **2 connectors** IEC and F at the output.
- **DC pass through** from F connector (SAT) and the input clamp for terminal outlet and from F connector (SAT) and the input/output clamp on the passrthrough outlet
- The outlet is designed with an innovative system to connect to coaxial cable. It enables the user to connect to a cable with a diameter between 5 and 7mm.
- Fully shielded (**class A**)
- **plastic adapter** for all the brands available on the market
- Comply to EN50083-4

Item		PDM00	PDM05	PDM10
Code		220003	220002	220001
Insertion loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	-	6	4
	SAT 950-1750 MHz	-	6	4
	SAT 1750-2150 MHz	-	6	4
	SAT 2150-2400 MHz	-	6	4
Tap loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	2	6	10
	SAT 950-1750 MHz	2	6	11
	SAT 1750-2150 MHz	2	6	11
	SAT 2150-2400 MHz	2	6	11
Outlet type		Terminal outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male, F female	IEC male, F female	IEC male, F female

Distribution

TV-SAT WALLOUTLET

PDM00

PDM10

Item		PDM14	PDM18	PDM22
Code		220004	220005	220006
Insertion loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	3	2.5	2.5
	SAT 950-1750 MHz	3.5	3.5	3.5
	SAT 1750-2150 MHz	3.5	3.5	3.5
	SAT 2150-2400 MHz	3.5	3.5	3.5
Tap loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	14	19	22
	SAT 950-1750 MHz	15	19	23
	SAT 1750-2150 MHz	15	19	23
	SAT 2150-2400 MHz	15	19	23
Outlet type		Passthrough outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male, F female	IEC male, F female	IEC male, F female

OUTLET ADAPTORS

OUTLET ADAPTORS Series

plastic adapter for all the brands available on the market

BT-INT

BT-INT2

Item	Code	adaptors	Color	Type	Pcs
BT-AX	287126	Ticino Axolute ®	White	Single	20
BT-AX2	287127	Ticino Axolute ®	White	Demix	10
BT-AXS	289737	Ticino Axolute Silver ®	Silver	Single	20
BT-AXS2	289739	Ticino Axolute Silver ®	Silver	Demix	10
BT-AXB	289738	Ticino Axolute Black ®	Black	Single	20
BT-AXB2	289740	Ticino Axolute Black ®	Black	Demix	10
BT-INT	280754	Ticino International ®	Black	Single	20
BT-INT2	280801	Ticino International ®	Black	Demix	10
BT-LIG	280752	Ticino Light ®	Ice	Single	20
BT-LIG2	280802	Ticino Light ®	Ice	Demix	10
BT-LIGT	280699	Ticino Light Tech ®	Dark grey	Single	20
BT-LIGT2	280803	Ticino Light Tech ®	Dark grey	Demix	10
BT-MA	280755	Ticino Magic ®	Ivory	Single	20
BT-MA2	280804	Ticino Magic ®	Ivory	Demix	10
BT-LIV	280753	Ticino Living ®	Black	Single	20
BT-LIV2	280805	Ticino Living ®	Black	Demix	10
BT-LU	280756	Ticino Luna ®	White	Single	20
BT-LU2	280806	Ticino Luna ®	White	Demix	10
BT-MAT	280757	Ticino Matix ®	White	Single	20
BT-MAT2	280807	Ticino Matix ®	White	Demix	10
BT-TT	280742	Ticino Magic TT ®	Ivory	Single	20
BT-MATT2	280808	Ticino Magic TT ®	Ivory	Demix	10
VI-EKN	289798	Vimar Eikon Next ®	Dark grey	Single	20
VI-EKN2	289799	Vimar Eikon Next ®	Dark grey	Demix	10
VI-EKW	280839	Vimar Eikon White ®	White	Single	20
VI-EKW2	280840	Vimar Eikon White ®	White	Demix	10
VI-EKB	289741	Vimae Eikon Black ®	Black	Single	20
VI-EKB2	289742	Vimae Eikon Black ®	Black	Demix	10
VI-ID	280749	Vimar Idea ®	Black	Single	20
VI-ID2	280810	Vimar Idea ®	Black	Demix	10
VI-IDB	280748	Vimar Idea white ®	White	Single	20
VI-IDB2	280811	Vimar Idea white ®	White	Demix	10
VI-80	280750	Vimar 8000 ®	Ivory	Single	20
VI-802	280809	Vimar 8000 ®	Ivory	Demix	10
VI-PL	280751	Vimar Plana ®	White	Single	20
VI-PL2	280812	Vimar Plana ®	White	Demix	10
VI-PLS	287121	Vimar Plana Silver ®	Silver	Single	20
VI-PLS2	287122	Vimar Plana Silver ®	Silver	Demix	10

OUTLET ADAPTORS

OUTLET ADAPTORS Series

plastic adapter for all the brands available on the market

BT-MAT

BT-MAT2

VI-PL

VI-PL2

PL1

Item	Code	adaptors	Color	Type	Pcs
GW-CB	280837	Gewiss Chorus polish White ®	Shiny white	Single	20
GW-CB2	280838	Gewiss Chorus polish White ®	Shiny white	Demix	10
GW-CN	280835	Gewiss Chorus silk black ®	Nero lucido	Single	20
GW-CN2	280836	Gewiss Chorus silk black ®	Nero lucido	Demix	10
GW-CT	280833	Gewiss Chorus Titanium ®	Colored titanium	Single	20
GW-CT2	280834	Gewiss Chorus Titanium ®	Colored titanium	Demix	10
GW-PL	280797	Gewiss Playbus ®	Black	Single	20
GW-PL2	280813	Gewiss Playbus ®	Black	Demix	10
GW-SYB	280796	Gewiss System Black ®	Black	Single	20
GW-SYB2	280814	Gewiss System Black ®	Black	Demix	10
GW-SYW	280798	Gewiss System White ®	White	Single	20
GW-SYW2	280815	Gewiss System White ®	White	Demix	10
AB-CH	280831	ABB Chiara ®	White	Single	20
AB-CH2	280832	ABB Chiara ®	White	Demix	10
AV-SNO	280743	Ave Sistema 45 Noir ®	Black	Single	20
AV-SNO2	280816	Ave Sistema 45 Noir ®	Black	Demix	10
AV-SBA	280745	Ave Sistema 45 Banquise ®	Ice	Single	20
AV-SBA2	280817	Ave Sistema 45 Banquise ®	Ice	Demix	10
AV-SBL	280746	Ave Sistema 45 Blanc ®	White	Single	20
AV-SBL2	280818	Ave Sistema 45 Blanc ®	White	Demix	10
LG-CR	280747	Legrand Cross ®	White	Single	20
LG-CR2	280820	Legrand Cross ®	White	Demix	10
LG-VES	280800	Legrand Vela Scura ®	Black	Single	20
LG-VES2	280821	Legrand Vela Scura ®	Black	Demix	10
LG-VEC	280799	Legrand Vela Chiara ®	Ice	Single	20
LG-VEC2	280822	Legrand Vela Chiara ®	Ice	Demix	10
VI-ARK-B	287331	Arke Black ®	Black	Single	20
VI-ARK2-B	287304	Arke Black ®	Black	Demix	10
VI-ARK-W	287330	Arke White ®	White	Single	20
VI-ARK2-W	287303	Arke White ®	White	Demix	10
PL1	280736	SPI and SPF plastic cover (European box Ø 60mm)	White	Demix	50
GW-PL	280797	Gewiss Playbus ®	Black	Single	20
GW-PL2	280813	Gewiss Playbus ®	Black	Demix	10
GW-SYB	280796	Gewiss System Black ®	Black	Single	20
GW-SYB2	280814	Gewiss System Black ®	Black	Demix	10
GW-SYW	280798	Gewiss System White ®	White	Single	20
GW-SYW2	280815	Gewiss System White ®	White	Demix	10
AB-CH	280831	ABB Chiara ®	White	Single	20
AB-CH2	280832	ABB Chiara ®	White	Demix	10
AV-SNO	280743	Ave Sistema 45 Noir ®	Black	Single	20
AV-SNO2	280816	Ave Sistema 45 Noir ®	Black	Demix	10
AV-SBA	280745	Ave Sistema 45 Banquise ®	Ice	Single	20
AV-SBA2	280817	Ave Sistema 45 Banquise ®	Ice	Demix	10
AV-SBL	280746	Ave Sistema 45 Blanc ®	White	Single	20
AV-SBL2	280818	Ave Sistema 45 Blanc ®	White	Demix	10
LG-CR	280747	Legrand Cross ®	White	Single	20
LG-CR2	280820	Legrand Cross ®	White	Demix	10
LG-VES	280800	Legrand Vela Scura ®	Black	Single	20
LG-VES2	280821	Legrand Vela Scura ®	Black	Demix	10
LG-VEC	280799	Legrand Vela Chiara ®	Ice	Single	20
LG-VEC2	280822	Legrand Vela Chiara ®	Ice	Demix	10
VI-ARK-B	287331	Arke Black ®	Black	Single	20
VI-ARK2-B	287304	Arke Black ®	Black	Demix	10
VI-ARK-W	287330	Arke White ®	White	Single	20
VI-ARK2-W	287303	Arke White ®	White	Demix	10

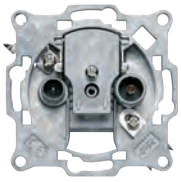
Distribution

WALLMOUNT TV SAT OUTLET

PRI DEMIX roiund outlet

Wallmount **Round demix outlet 2 output** female IEC connector for TVband (5-40MHz, 47-862MHz) and male IEC connector for Satellite band (950-2300MHz)

- **Demix on SAT and TV on 2 outputs** Signals combined at the input.
- **DC passthrough** between male IEC (SAT) and the inout clamp for terminal outlet, andbetween male IEC (SAT) and the input/output clamp on the passthrough outlet.
- High shielding
- High silotatino between bands
- Low insertion loss
- Quick and easy installation
- **Plastic adapter** available (PL2)



PRI00

Item			PRI00	PRI06	PRI10
Code			280730	280731	280732
TV	Connector		IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-40 / 47-862	5-40 / 47-862	5-40 / 47-862
TV	Insertion loss	dB	1.5	2	1.5
SAT	Connector		IEC male	IEC male	IEC male
SAT	Bandwidth	MHz	950-2300	950-2300	950-2300
SAT	Insertion loss	dB	2	2.5	2
Tap loss	5-2400 MHz	dB	-	6	10
Outlet type			Terminal outlet	Passthrough outlet	Passthrough outlet
Dimensions		mm	76x76x32	76x76x32	76x76x32

Item			PRI14	PRI18	PRI22
Code			280733	280734	280735
TV	Connector		IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-40 / 47-862	5-40 / 47-862	5-40 / 47-862
TV	Insertion loss	dB	1.5	1.5	1.5
SAT	Connector		IEC male	IEC male	IEC male
SAT	Bandwidth	MHz	950-2300	950-2300	950-2300
SAT	Insertion loss	dB	2	2	2
Tap loss	5-2400 MHz	dB	14	18	22
Outlet type			Passthrough outlet	Passthrough outlet	Passthrough outlet
Dimensions		mm	76x76x32	76x76x32	76x76x32

WALLMOUNT TV SAT OUTLET

PAS00 TV/SAT round outlet Series

Wallmount **Demix round outlet** with **2, 3 or 4 outputs** Radio IEC male connctor, TV IEC female connector and SAT F female connector.

PAS0021D

Item			PAS0021D	PAS0032	PAS0032D
Code			PAS0021D	PAS0032	PAS0032D
Outputs			2	3	3
TV	Connector		IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-68 / 260-862	5-68 / 120-862	5-68 / 260-862
TV	insertion loss	dB	2	1.5	1.5
R	Connector		IEC male	IEC male	IEC male
R	Bandwidth	MHz	88-240	88-108	88-240
R	insertion loss	dB	3	2	2
SAT1	Connector		-	F female	F female
SAT1	Bandwidth	MHz	-	950-2150	950-2300
SAT1	insertion loss	dB	-	2	2
Outlet type			Terminal outlet	Terminal outlet	Terminal outlet
Dimensions			80x80x48	80x80x48	80x80x48

WALLMOUNT TV SAT OUTLET

PAS0023311

PAS0042D

PAS0042

Item			PAS0042	PAS0042D	PAS0023311	PAS0023411
Code			PAS0042	280793	PAS0023311	PAS0023411
Outputs			4	4	2	2
TV	Connector		IEC Female	IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-68 / 120-862	5-68 / 260-862	5-68 / 120-862	5-68 / 120-862
TV	insertion loss	dB	2.5	2.5	1.5	1
R	Connector		IEC male	IEC male	IEC male	IEC male
R	Bandwidth	MHz	88-108	88-240	88-108	88-108
R	insertion loss	dB	2.5	2.5	1.5	1
SAT1	Connector		F female	F female	-	-
SAT1	Bandwidth	MHz	950-2150	950-2150	-	-
SAT1	insertion loss	dB	2	2	-	-
SAT2	Connector		F female	F female	-	-
SAT2	Bandwidth	MHz	5-2150	5-2150	-	-
SAT2	insertion loss	dB	3	3	-	-
Outlet type			Terminal outlet	Terminal outlet	Passthrough outlet	Passthrough outlet
Dimensions			80x80x48	80x80x48	80x80x48	80x80x48

CABLE CONNECTOR

IEC connector Series

Male and female IEC cable connectors

- screw Inner conductor connection
- Quick and easy installation
- Compact dimensions

SP1

PR5

Item		SP1	SP5	PR1	PR5	PR11
Code		290351	290354	290451	290454	290365
Connector		IEC male	IEC male	IEC Female	IEC Female	90° female IEC
Inner connection		Screw	Screw	Screw	Screw	Screw
braiding connection		Screw	Clamp	Screw	Clamp	Clamp
cable diameter	mm	9.5	8	9.5	8	7,5
Pcs	No.	100	100	100	100	50

Item		CCOM_IEC6F	CCOM_IEC6M
Code		287298	287300
Connector		IEC Female	IEC male
braiding connection		Compression	Compression
cable diameter	mm	5.9-6.0	5.9-6.0
Pcs	No.	100	100

Distribution

CABLE CONNECTOR

F Connector Series

several types of screw F connector, crim or compression

- Quick and easy installation
- Compact dimensions

CF50B

CFR50B

CCF66

CCOM_F5.1S

Item		CF50B	CF60B	CF66B	CF70B
Code		287189	287190	287191	287192
Connector		Screw Male F connector	Screw Male F connector	Screw Male F connector	Screw Male F connector
Cable connection		Screw	Screw	Screw	Screw
cable diameter	mm	4.9-5.0	5.9-6.0	6.5-6.6	6.9-7.0
Ring color		Red	Green	Yellow	Blue
Pcs	No.	100	100	100	100

Item		CFR50B	CFR60B	CFR66B
Code		287193	287194	287195
Connector		Quick Male F connector	Quick Male F connector	Quick Male F connector
Cable connection		Screw	Screw	Screw
cable diameter	mm	4.9-5.0	5.9-6.0	6.5-6.6
Ring color		Red	Green	Yellow
Pcs	No.	100	100	100

Item		CCF66
Code		289768
Connector		Screw Male F connector
Cable connection		Crimp
cable diameter	mm	6.5-6.6
Ring color		Yellow
Pcs	No.	100

Item		CCOM_F5.1	CCOM_F5.1S	CCOM_F10.5
Code		287301	287295	287297
Connector		Screw Male F connector	Screw Male F connector	Screw Male F connector
Cable connection		Compression	Compression self install	Compression
cable diameter	mm	5.0-5.1	5.0-5.1	10.4-10.5
Ring color		light blue	light blue	Yellow
Pcs	No.	100	50	100

CONNECTOR ACCESSORIES

75ohm Loads Series

75 ohm loads

CA75F

CR75I

Item	Code	Description	Pcs
CA75F	289085	F connector 75ohm load	100
T75IF	290002	Isolated 75 ohm load	20
CR75I	289776	Coaxial isolated 75 ohm load	20

Adapter Series

Accessories and adapters for several connectors or cables

TF90

Item	Code	Description	Pcs
TF90	289543	90° F male-female	50
GCF	289544	F female-F female connector	50
GC1	290030	Mal-Male F connector	100
PAUTV	280373	Double F femele-F female with earth bouding screw	250
PAS3236Q	PAS3236Q	Quick F male-F male	1
PAS3213001	PAS3213001	F male-F Female with DC block	20
PAS6106	PAS6106	6dB in line attenuator 5-2400MHz, DC pass	5
AR20F	287202	20dB adjustable in line attenuator 5-2400MHz, DC pass	5

COAXIAL CABLES

Indoor use cables

PAS4025202

PAS4037104

PAS4016102

Item			PAS4025202	PAS4037104	PAS4016102
Code			289700	PAS4037104	PAS4016102
Inner coductor	Material		CU	CU	CU
	Diameter	mm	0.80	1.13	1.0
Dielettric	Material		PEE	PEE	PEE
	Diameter	mm	3.5	4.85	4.7
Braid	Foil		Al/Pet	Al/Pet	Al/Pet
		%	100%	100%	100%
	Braid		CuSn	Al	CuSn
		%	40%	35%	40%
Antimigrating foil			PET	PET	PET
Jacket outdoor use	Material		White PVC	White PVC	White PVC
	Diameter	mm	5	6.8	6.7
Impedance	@ 200 MHz	Ohm	75	75	75
Capacity		pF/m	52	52	52
Propagation speed			85%	85%	85%
Minimum bending radius			35	35	35
Attenuation	@ 5 MHz	dB	2.0	1.5	1.6
	@ 50 MHz	dB	5.9	4.3	4.6
	@ 200 MHz	dB	11.3	8.4	9.0
	@ 470 MHz	dB	17.6	13.6	14.5
	@ 800 MHz	dB	23.3	17.2	18.6
	@ 1000 MHz	dB	26.3	19.8	21.1
	@ 1350 MHz	dB	30.8	23.3	25.0
	@ 1750 MHz	dB	35.6	27.0	27.9
	@ 2150 MHz	dB	40.0	30.6	31.7
	@ 2400 MHz	dB	42.2	32.5	33.2
	@ 2700 MHz	dB	45.2	35.0	35.8
Return loss	@ 30-470 MHz	dB	>28	>29	>30
	@ 470-862 MHz	dB	>26	>25	>25
	@ 862-1750 MHz	dB	>20	>20	>20
	@ 1750-2400 MHz	dB	>20	>20	>20
Shielding efficiency	@ 5-30 MHz	dB	>65	>65	>75
	@ 30-1000 MHz	dB	>80	>80	>85
	@ 1000-2150 MHz	dB	>85	>70	>85
Inner conductor resistance		Ohm/Km	35	21.5	22.5
Outer conductor resistance		Ohm/Km	33	27	27
Lenght		m	200	100	100

Distribution

COAXIAL CABLES

Indoor use cables

PAS4017101

PAS4007111

PAS4009101

Item			PAS4017101	PAS4007111	PAS4009101
Code			PAS4017101	PAS4007111	PAS4009101
Inner coductor	Material		CU	CU	CU
	Diameter	mm	1.13	1.13	1.7
Dielettric	Material		PEE	PEE	PEE
	Diameter	mm	4.8	4.8	7.2
Braid	Foil		Al/Pet	Al/Pet/Al	Al/Pet
		%	100%	100%	100%
	Braid		CuSn	CuSn	CuSn
		%	40%	40%	56%
	Foil		-	Al/Pet	-
		%	-	100%	-
Antimigrating foil			PET	PET	PET
Jacket outdoor use	Material		White PVC	White PVC	White PVC
	Diameter	mm	6.8	6.8	10.2
Impedance	@ 200 MHz	Ohm	75	75	75
Capacity		pF/m	52	52	52
Propagation speed			85%	85%	85%
Minimum bending radius			35	35	115
Attenuation	@ 5 MHz	dB	1.3	1.3	0.8
	@ 50 MHz	dB	4.3	4.1	2.6
	@ 200 MHz	dB	8.4	8.0	5.4
	@ 470 MHz	dB	13.4	12.6	8.5
	@ 800 MHz	dB	17.2	16.8	11.0
	@ 1000 MHz	dB	19.5	18.9	12.9
	@ 1350 MHz	dB	23.0	22.3	15.2
	@ 1750 MHz	dB	26.2	25.5	17.6
	@ 2150 MHz	dB	29.5	28.7	19.8
	@ 2400 MHz	dB	31.9	30.4	21.5
	@ 2700 MHz	dB	33.0	32.8	23.2
Return loss	@ 30-470 MHz	dB	>30	>30	>30
	@ 470-862 MHz	dB	>28	>28	>28
	@ 862-1750 MHz	dB	>23	>25	>25
	@ 1750-2400 MHz	dB	>23	>20	>18
Shielding efficiency	@ 5-30 MHz	dB	>75	>85	>80
	@ 30-1000 MHz	dB	>85	>95	>85
	@ 1000-2150 MHz	dB	>85	>90	>85
Inner conductor resistance		Ohm/Km	18	18	9
Outer conductor resistance		Ohm/Km	26	21	9.7
Lenght		m	100	100	100

COAXIAL CABLES

Outdoor cables Series

PAS4136104

PAS4116102

PAS4117101

PAS4107111

PAS4109101

Item			PAS4136104	PAS4116102	PAS4117101	PAS4107111	PAS4109101
Code			PAS4136104	PAS4116102	PAS4117101	PAS4107111	PAS4109101
Inner coductor	Material		CU	CU	CU	CU	CU
	Diameter	mm	1.0	1.0	1.13	1.13	1.7
Dielettric	Material		PEE	PEE	PEE	PEE	PEE
	Diameter	mm	4.7	4.7	4.8	4.8	7.2
Braid	Foil		Al/Pet	Al/Pet	Al/Pet	Al/Pet/Al	Al/Pet
		%	100%	100%	100%	100%	100%
	Braid		CuSn	CuSn	CuSn	CuSn	CuSn
		%	30%	40%	40%	40%	56%
	Foil		-	-	-	Al/Pet	-
		%	-	-	-	100%	-
Antimigrating foil			PET	PET	PET	PET	PET
Jacket outdoor use	Material		Black PVC	Black PVC	Black PVC	Black PVC	Black PVC
	Diameter	mm	6.7	6.7	6.8	6.8	10.2
Impedance	@ 200 MHz	Ohm	75	75	75	75	75
Capacity		pF/m	52	52	52	52	52
Propagation speed			85%	85%	85%	85%	85%
Minimum bending radius			35	35	35	35	115
Attenuation	@ 5 MHz	dB	1.6	1.6	1.3	1.3	0.8
	@ 50 MHz	dB	4.6	4.6	4.3	4.1	2.6
	@ 200 MHz	dB	9.0	9.0	8.4	8.0	5.4
	@ 470 MHz	dB	14.5	14.5	13.4	12.6	8.5
	@ 800 MHz	dB	18.6	18.6	17.2	16.8	11.0
	@ 1000 MHz	dB	21.1	21.1	19.5	18.9	12.9
	@ 1350 MHz	dB	25.0	25.0	23.0	22.3	15.2
	@ 1750 MHz	dB	27.9	27.9	26.2	25.5	17.6
	@ 2150 MHz	dB	31.7	31.7	29.5	28.7	19.8
	@ 2400 MHz	dB	33.2	33.2	31.9	30.4	21.5
	@ 2700 MHz	dB	35.8	35.8	33.0	32.8	23.2
Return loss	@ 30-470 MHz	dB	>30	>30	>30	>30	>30
	@ 470-862 MHz	dB	>25	>25	>28	>28	>28
	@ 862-1750 MHz	dB	>20	>20	>23	>25	>25
	@ 1750-2400 MHz	dB	>20	>20	>23	>20	>18
Shielding efficiency	@ 5-30 MHz	dB	>65	>75	>75	>85	>80
	@ 30-1000 MHz	dB	>75	>85	>85	>95	>85
	@ 1000-2150 MHz	dB	>80	>85	>85	>90	>85
Inner conductor resistance		Ohm/ Km	22.5	22.5	18	18	9
Outer conductor resistance		Ohm/ Km	31	27	26	21	9.7
Lenght		m	100	100	100	100	100

COAXIAL CABLES

Multiple cable Series

PAS4004112

PAS4304102

PAS4004102

PAS4004109

Item			PAS4004112	PAS4304102	PAS4004102	PAS4004109
Code			PAS4004112	PAS4304102	PAS4004102	PAS4004109
Inner coductor	Material		CU	CU	CU	CU
	Diameter	mm	1.71.0	1.0	1.0	1.13
Dielettric	Material		PEE	PEE	PEE	PEE
	Diameter	mm	7.4	7.4	7.4	4.8
Braid	Foil		Al/Pet	Al/Pet	Al/Pet	Al/Pet
		%	100%	100%	100%	100%
	Braid		CuSn	CuSn	CuSn	CuSn
		%	40%	40%	40%	40%
Antimigrating foil			PET	PET	PET	PET
Jacket indoor ude	Material		PVC 4 color	PVC 4 color	PVC 5 color	PVC 9 color
	Diameter	mm	6.6	6.6	6.6	6.6
Jacket outdoor use	Material		White PVC	White PVC	White PVC	Black PVC
	Diameter	mm	19	19	20.5	25
Impedance	@ 200 MHz	Ohm	75	75	75	75
Capacity		pF/m	52	52	52	52
Propagation speed			85%	85%	85%	85%
Minimum bending radius			100	100	100	200
Attenuation	@ 5 MHz	dB	1.6	1.6	1.6	1.3
	@ 50 MHz	dB	4.6	4.6	4.6	4.3
	@ 200 MHz	dB	9.0	9.0	9.0	8.4
	@ 470 MHz	dB	14.5	14.5	14.5	13.4
	@ 800 MHz	dB	18.6	18.6	18.6	17.2
	@ 1000 MHz	dB	21.1	21.1	21.1	19.5
	@ 1350 MHz	dB	25.0	25.0	25.0	23.0
	@ 1750 MHz	dB	27.9	27.9	27.9	26.2
	@ 2150 MHz	dB	31.7	31.7	31.7	29.5
	@ 2400 MHz	dB	33.2	33.2	33.2	31.9
	@ 2700 MHz	dB	35.8	35.8	35.8	33.0
Return loss	@ 30-470 MHz	dB	>30	>30	>30	>30
	@ 470-862 MHz	dB	>25	>25	>25	>28
	@ 862-1750 MHz	dB	>20	>20	>20	>23
	@ 1750-2400 MHz	dB	>20	>20	>20	>23
Shielding efficiency	@ 5-30 MHz	dB	>30	>30	>30	>30
	@ 30-1000 MHz	dB	>85	>85	>85	>85
	@ 1000-2150 MHz	dB	>85	>85	>85	>85
Inner conductor resistance		Ohm/Km	22.5	22.5	22.5	18
Outer conductor resistance		Ohm/Km	27	27	27	26
Lenght		m	100	100	100	100

Distribution componentes with F connectors

Coaxial cables for indoor installation with PVC sheath

Fracarro offers both single installation cable (class B) or large network cables (class A) e.g. hotels, resorts, hospitals, etc. Double screened cable is available for high screening efficiency (more than 90dB), required fr professional installations.

Coaxial cables for outdoor installation with PE sheath

Class A cables with high screening efficiency and low attenuation. The PE sheath allows the cables to be installated in external or damp environments.

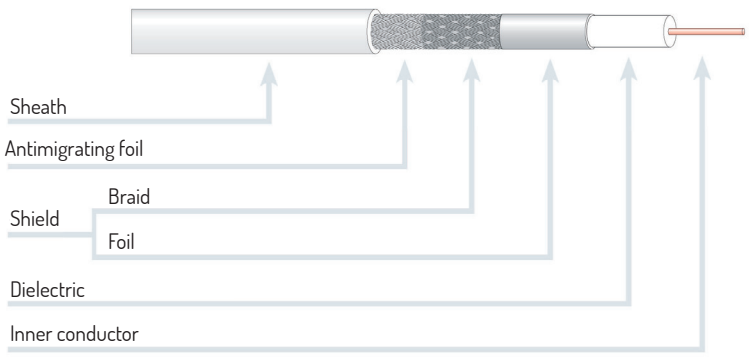
Multicoax cables

These cables can be used in multiswitch networks where a large number of cables are installated. Inside one sheath there are 4, 5 or 9 cables with different colours to make indentification and connection to switches easier.

General features

Installation temperature: -5°C ÷ +50°C
Operating temperature: -15°C ÷ +55°C
Compliant to EN50117

Coaxial cables - legend



Legend	
Cu:	Copper
CW:	Copper steel
AL:	Aluminium
Cusn:	Tinned copper
PEE:	Physical foam polyethylene
PE:	Polyethylene
PET	Pet foil
PVC:	Polyvinyl chloride
LSZH:	Low smoke zero halogens
AL/PET:	Aluminium + Pet foil
AL/PET/AL:	Aluminium + Pet + Aluminium foil
Cu/PET:	Copper + Pet foil
Cu/PET/Cu:	Copper + Pet + Copper foil

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Index of products

Note

Note

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