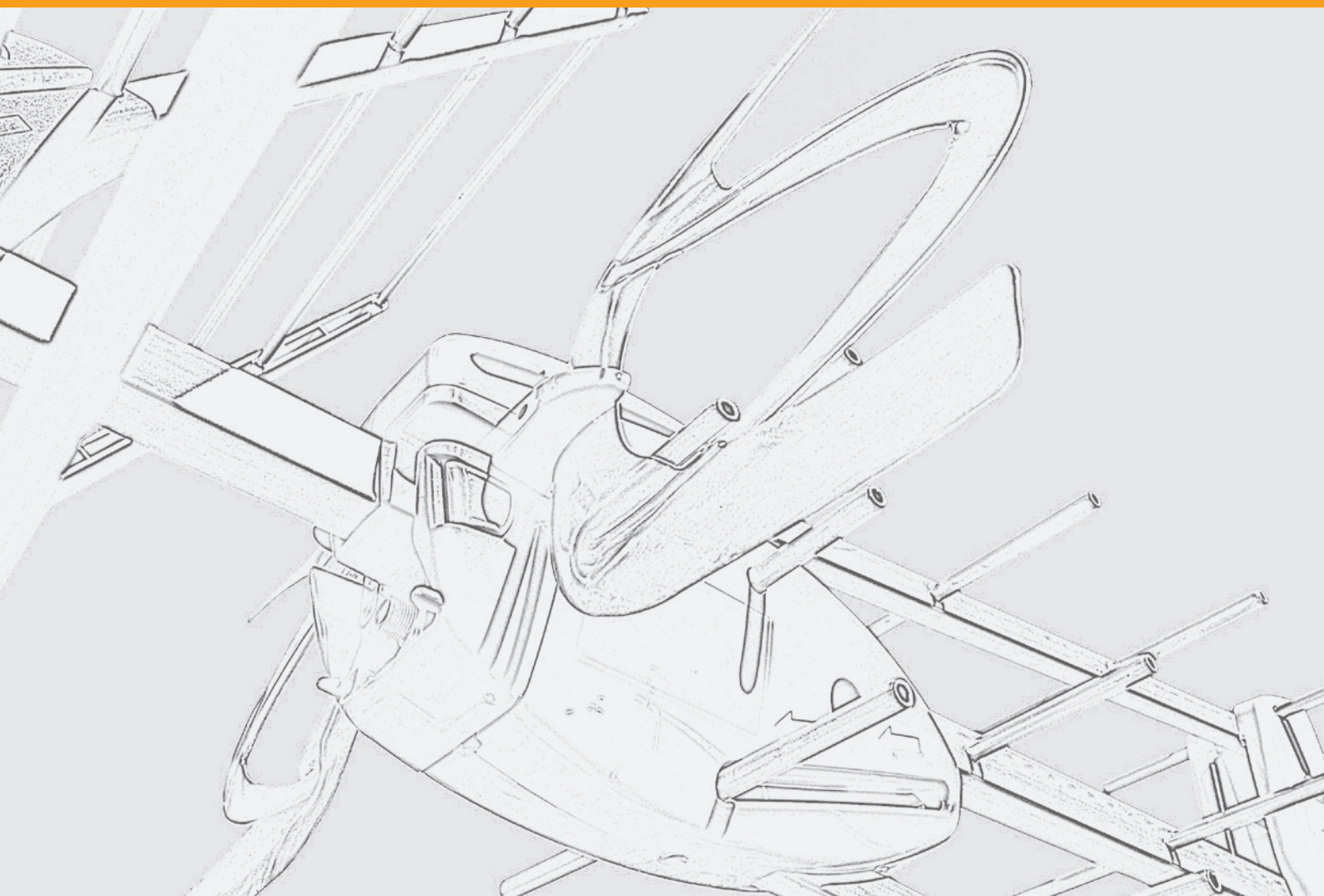


Televes®

TERRESTRIAL ANTENNAS



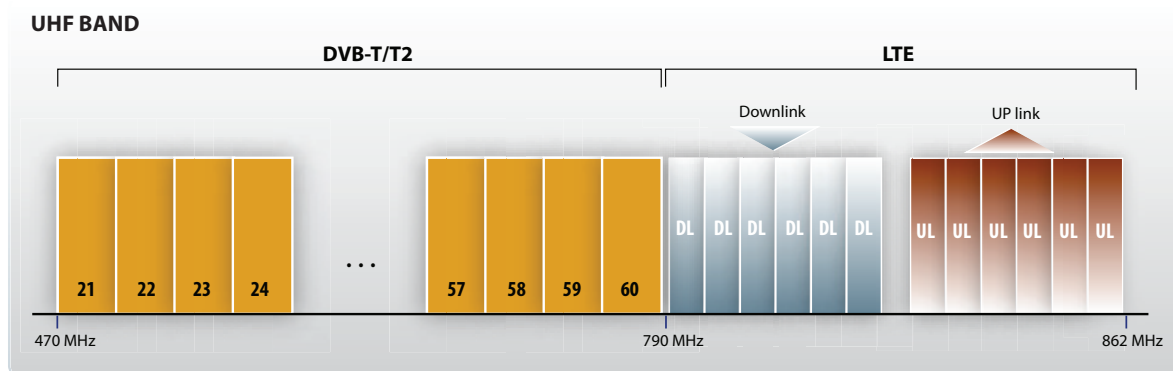
BOSStech: Balanced Output Signal System

- ▶ Automatic balancing of the output level of the received signal.
- ▶ BOSStech technology controls fully automatically the level of the output signal in order to optimize the performance of the reception system.
- ▶ The first intelligent antenna.



LTE/4G

The UHF band will be shared by DVB-T transmission as well as 4G carriers. UHF Channels 61 to 69 will be allocated to mobile internet access.





BOSS ANTENNAS

DAT HD BOSS MIX



QR-A00107

Mixed antenna for BIII (174-230 MHz) and UHF (470-790/862 MHz) reception. In "790" version LTE band is filtered out through the design of the antenna, so the frequency range of UHF band is 470-790MHz.

- ▶ The UHF section is a triple Yagi antenna consisting of an special "doble U dipole", a corner reflector, and director which are distributed into 3 stacked Yagis fed in phase to obtain better gain, high directivity and well balanced bandwidth. The arrangement on th 3 Yagis cancels the power radiated either towards the ground or to the sky.
- ▶ The BIII section is also a Yagi style antenna of 3 elements, with 1 dipole and 2 reflectors.
- ▶ The structure is based on the well known DAT HD antenna with additional BIII elements. The BossTech is activated or not depending on the power supply voltage. The regulation of the gain affects both signals to the VHF and UHF.
- ▶ F connector.
- ▶ Made of alluminium for long life.

DAT^{HD} BOSS MIX 790



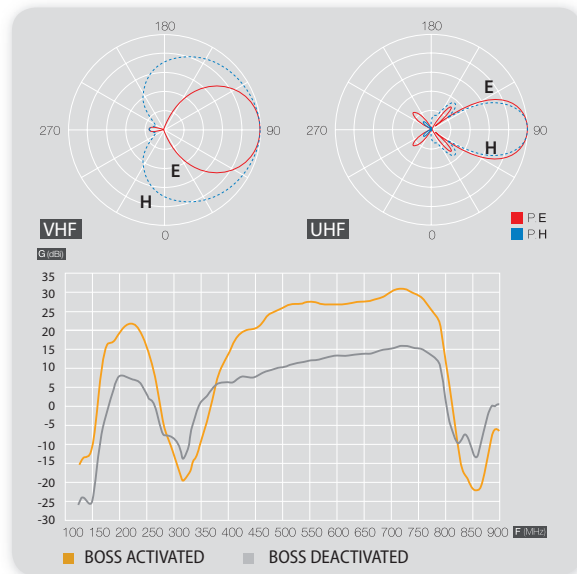
▲ 149401

REF.	DESCRIPTION
149401	DAT HD BOSS MIX 790 (single pack)
149402	DAT HD BOSS MIX 790 (5 units/pack)
149610	DAT HD BOSS MIX (4 units/pack)
149611	DAT HD BOSS MIX (single pack)



▲ 149410

RADIATION PATTERN



FREQUENCY RESPONSE

Reference		149610 / 149611				149401 / 149402			
		BOSS OFF		BOSS ON		BOSS OFF		BOSS ON	
Channels		5-12	21-69	5-12	21-69	5-12	21-60	5-12	21-60
Gain	dBi	8,5	16	21	28 max	8,5	16	21	31 max
Output level	dBμV	-		Auto		-		Auto	
Noise figure	dB	-		2		-		2	
Powering voltage	V _{dc}	0		12...24		0		12...24	
Consumption	mA	-		40		-		40	
Length	mm	1112				1200			
Wind load	800 N/m ²	135				120			
	1100 N/m ²	185				165			

Wind conditions

Antenna's height	m	≤ 20	> 20
Pressure	N/m ²	800	1100
Wind speed	Km/h	130	150

BOSS ANTENNAS

DAT HD BOSS



QR-A00010

The architecture of DAT HD antenna guarantee the RF characteristics in the UHF band. Based on the same concept DAT HD BOSS 790 is designed to optimize the performance of DTT reception in an environment with high 4G signals in UHF channels 61-69. For this, electrical parameters of BOSStech technology has been optimized.

- ▶ The DAT HD BOSS 790 has mechanical features that allow the folding of the structure and a fast tool-less securing system for the reflectors. High density mechanical design for optimal storage and shipment.
- ▶ When the BOSStech device (located in its junction box) is powered (active antenna), it works automatically adjusting the level of the received signal to an optimum value, this is: if the incoming level is low, the device raises the level at its output; and on the contrary, if the incoming level is too high, decreases the level at its output. In other words, it is an intelligent device that selfregulates the output level of the antenna to an optimum level. When the device is not powered (passive antenna) is completely transparent to the signal path. Do not worry about signal strength, just align the antenna and the Boss-Tech device will work for you.
- ▶ Made of aluminium for long life. F connector junction box.

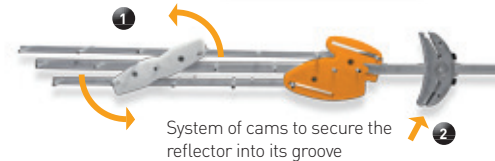


DAT HD BOSS 790



▲ 149901

Rotary folding mechanism



System of cams to secure the reflector into its groove

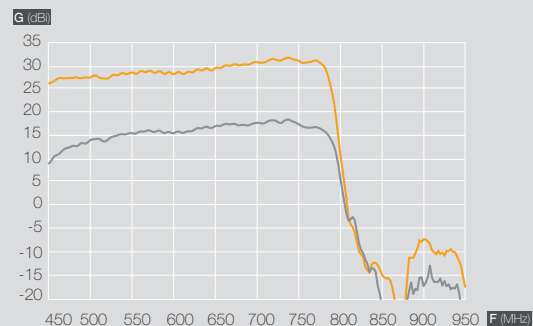
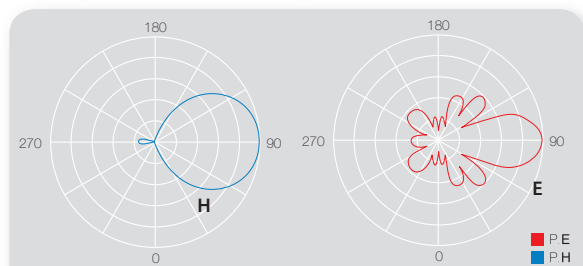
REF.	DESCRIPTION
149901	DAT BOSS 790 UHF (single pack)
149902	DAT BOSS 790 UHF (6 units/pack)
1495	DAT HD BOSS (5 units/pack)
149501	DAT HD BOSS (single pack)

Reference		149901/02		1495 / 149501	
BOSStech		OFF	ON	OFF	ON
Channels		21-60		21-69	
Max Gain	dBi	17	32	17	29
Output level	dBµV	-	Auto	-	Auto
Noise figure	dB	-	2	-	2
Recommended output level	dBµV	> 75	< 75	> 75	< 75
Power supply	V _{dc}	0	12...24	0	12...24
Maximum current	mA	-	40	-	40
Beamwidth	°	30		30	
Length	mm	1112		1112	
Wind load	800 N/m ²	N		120	120
	1100 N/m ²	N		165	165

Wind conditions

Antenna's height	m	≤ 20	> 20
Pressure	N/m ²	800	1100
Wind speed	Km/h	130	150

RADIATION PATTERN



FREQUENCY RESPONSE

BOSS ANTENNAS

DAT 75 HD BOSS 790



QR-A00257

Designed specifically for areas with extremely difficult reception conditions, getting a higher gain and directivity.

- ▶ In "790" version LTE band is filtered out through the design of the antenna, offering exclusive functionality to maximize the reception of the DTT in presence of 4G signals.
- ▶ BOSStech technology with optimized electrical parameters.
- ▶ Made of alluminium for long life. F connector junction box.



▲ 149741

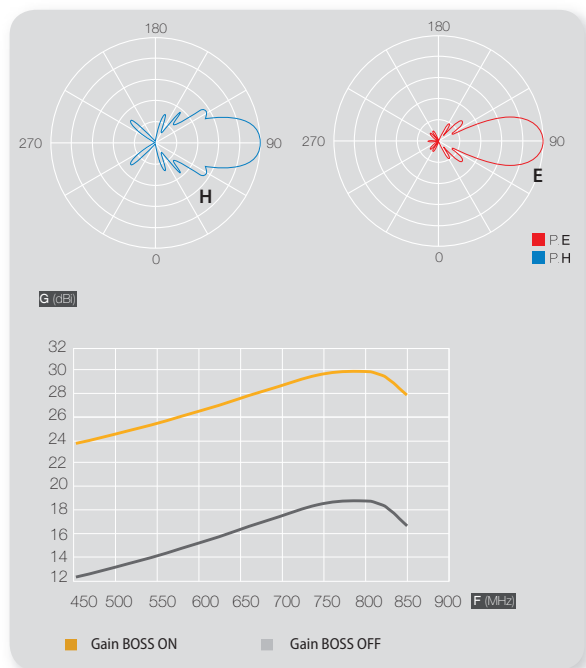


▲ 149701

REF.	DESCRIPTION
149741	DAT 75 HD BOSS 790 UHF (single pack)
149701	DAT HD BOSS 75 (single pack)

DAT HD⁷⁵ BOSS

DIAGRAMMA DI RADIAZIONE



RISPOSTA IN FREQUENZA

Reference	149741		149701		
BOSStech	OFF	ON	OFF	ON	
Channels	21-60		21-69		
Max Gain	dBi	19	31	19	31
Output level	dBμV	-	Auto	-	Auto
Noise figure	dB	-	2	-	2
Recommended output level	dBμV	> 75	< 75	> 75	< 75
Power supply	V _{dc}	0	12...24	0	12...24
Maximum current	mA	-	40	-	40
Beamwidth	°	27		27	
Length	mm	1825		1825	
Wind load	800 N/m ²	141		141	
	1100 N/m ²	194		194	

Wind conditions

Antenna's height	m	≤ 20	> 20
Pressure	N/m ²	800	1100
Wind speed	Km/h	130	150



Q-BOSS



QR-A00162

BOSStech products gives the possibility of adding the intelligence of the DAT HD BOSS 790 to any existing antenna.

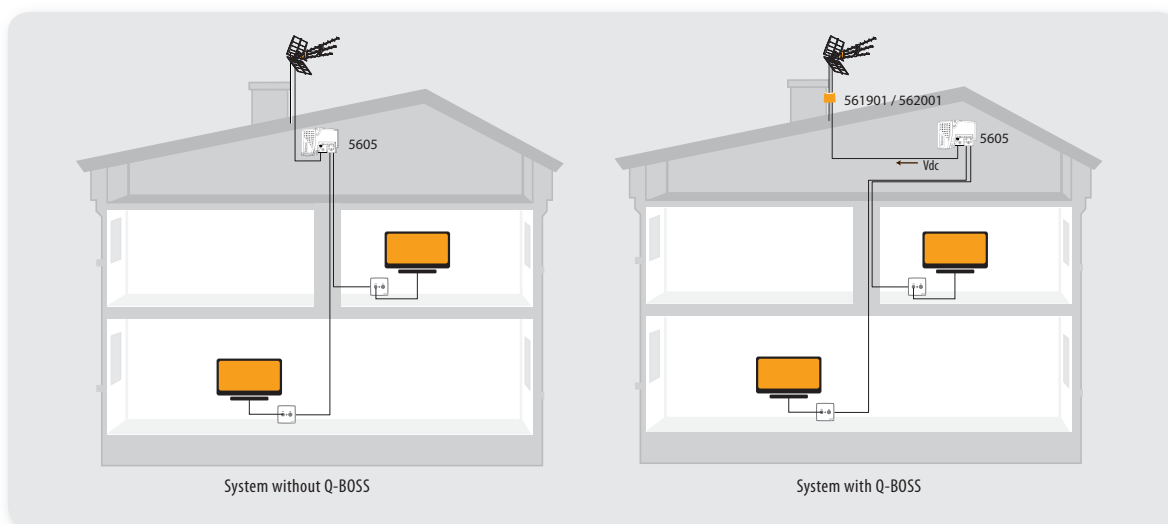
- ▶ Plug & Play devices that automatically adjust the level of the output signal to guarantee the highest possible quality.
- ▶ **Product designed for antennas not protected against LTE interference. Apart from automatically adjusting the gain of the DTT band (channels 21-60) it filters out the LTE band.**
- ▶ Allows the possibility of updating any antenna to perform in an LTE environment.
- ▶ Two different products for optimal performance depending on the DTT reception conditions: **Q-BOSS 790** for reception systems where Ch60 is in service and **Q-BOSS 774** for reception system up to Ch58.
- ▶ Electronic design using the latest component technology (1x0,5 mm) resulting in highly compact products with low power consumption.
- ▶ Fully automatic manufacturing process, guaranteeing the highest reliability.



▲ 561901

REF.	DESCRIPTION
561901	Q-BOSS 790
562001	Q-BOSS 774

Reference		561901	562001
UHF Band		C21-C60	C21-C58
Frequency range	MHz	470-790	470-774
Gain	dB	15	12
Output level DIN45004B	dBμV	102	100
AGC range	dB	0-20	0-20
Adjusted output level (10 channels TDT)	dBμV	85	82
Noise figure	dB	2	4
Power supply	V _{dc}	12-24	12-24
Current consumption	mA	40	37
Maximum input current		-	-
IP Protection index	IP	23	23
Dimensions (W x H x D)	mm	88 x 79 x 42	88 x 79 x 42





BOSS ANTENNAS: SPECIALS

DIGINOVA BOSS Antenna

DIGINOVA BOSS



QR-A00105

DIGINOVA model is an antenna of low visual impact that, automatically, optimizes the installation. Ideal for facades, balconies and houses. In the 790 version LTE band is filtered out through the design of the antenna.

- ▶ **Low consumption.**
- ▶ Its protection dome is made of UV high resistant plastic and waterproof (IP 53).
- ▶ **Easy installation**, either for vertical or horizontal polarisation.
- ▶ **BOSSTech** adapts itself to the received signal level. When the installer fits it, he does not have to worry about the input level as the antenna guarantees the most adequate output level to the distribution network.
- ▶ No matter the evolution of the number of channels being received. At the antenna output, the spectrum will be: free of intermodulation, noiseless, with the **best possible BER** and an optimized C/N. The antenna adjusts itself to future channels.

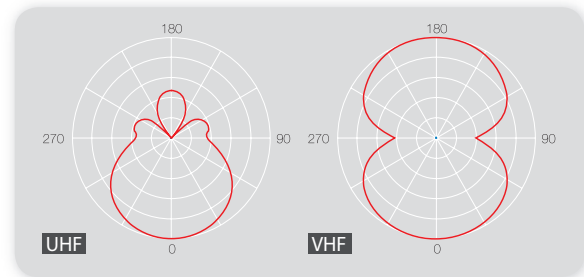


▲ 144111

REF.	DESCRIPTION
144141	DIGINOVA BOSS Antenna (UHF/VHF) "790 version"
144140	Kit DIGINOVA BOSS* "790 version"
144111	DIGINOVA BOSS Antenna (UHF/VHF)
144110	Kit DIGINOVA BOSS*

- * Kit includes:**
- 1 Diginova Antenna
 - 1 Domestic amplifier
 - 1 DC Power injector
 - 1 Roll of T-100 cable (14 m)
 - 1 Male/Female extension cable (1,5 m)
 - 1 Shielded IEC-type connector
 - 3 F-type connectors
 - 1 F watertight cover

RADIATION PATTERN



Reference		144140 / 144141 / 144110 / 144111					
BOSSTech		BOSS OFF			BOSS ON		
Operating bands		FM	BIII	UHF ⁽¹⁾	FM	BIII	UHF ⁽¹⁾
Gain	dBi	-2		4..7	0	10	16..19 19...22 @ "790 version"
Noise figure			-		-	<3	<2,5
Output level	dBμV		-			Auto	
Powering voltage	V _{dc}		0			12...24	
Consumption	12 V _{dc}		0			32	
	24 V _{dc}		0			42	
Dimensions(W x H x D)	mm	318 x 72 x 346					
Wind load	800 N/m ²				69,6		
	1100 N/m ²				95,7		
IP Protection index	IP				53		

Wind conditions

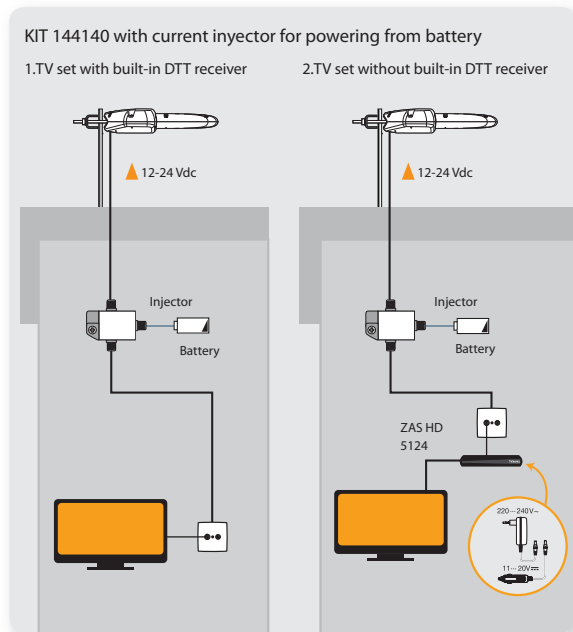
Antenna height	m	≤ 20	> 20
Wind pressure	N/m ²	800	1100
Wind speed	Km/h	130	150

(1) UHF band:
144110 / 144111: 470...862 Mhz
144140 / 144141: 470...790 Mhz "790 version"

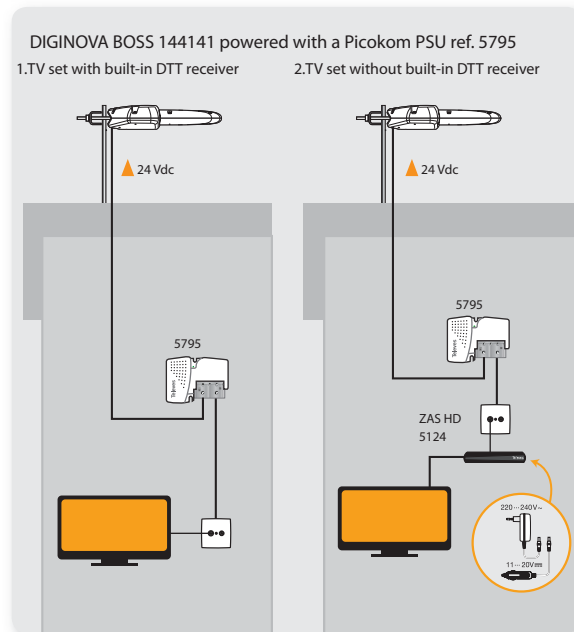
BOSS ANTENNAS: SPECIALS

DIGINOVA BOSS Antenna

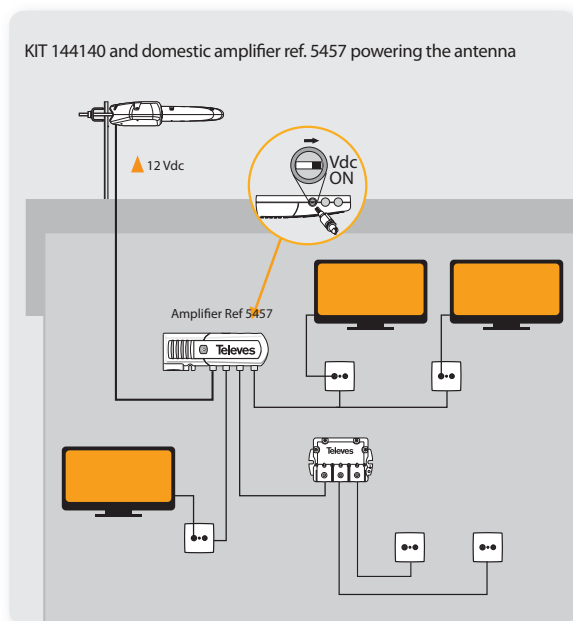
FM, BIll & DTT (UHF) reception in caravans and campervans



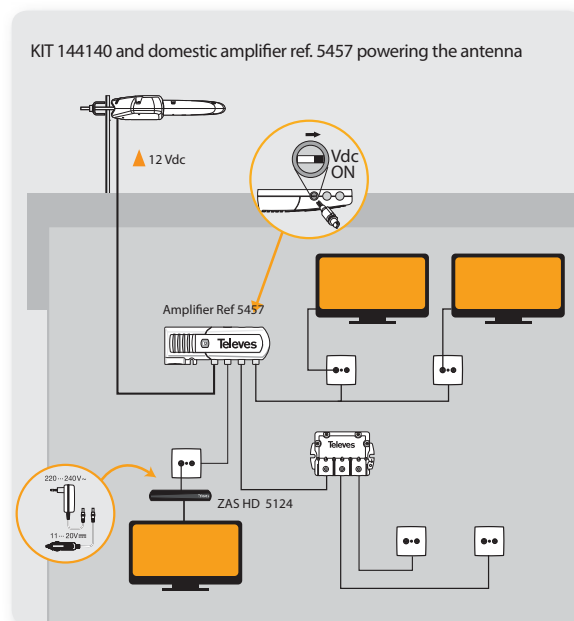
FM, BIll & DTT (UHF) reception in TV sets without built-in DTT



FM, BIll & DTT reception (UHF) in TV sets with built-in DTT.



FM, BIll & DTT reception in a expanded distribution network and TV sets without built-in DTT receiver





BOSS ANTENNAS: SPECIALS

OMNINOVA BOSS Antenna



QR-A00106

The OMNINOVA BOSS antenna is an antenna of low visual impact that, automatically, optimizes the installation. Ideal for vehicles and boats.

- ▶ **Low consumption.**
- ▶ Incorporates an AM antenna.
- ▶ Watertight dome made of UV **high resistant** plastic. IP=53.
- ▶ Includes **3 amplifiers**, one for each operating band (FM, BI-BIII, UHF) which avoids interferences, minimizing cross-modulation effects.
- ▶ Equipped with **rejection-filters** for out-band signals like marine telecommunication bands.
- ▶ **BOSSTech** adapts itself to the received signal level. When the installer fits it, he does not have to worry about the input level as the antenna guarantees the most adequate output level to the distribution network.

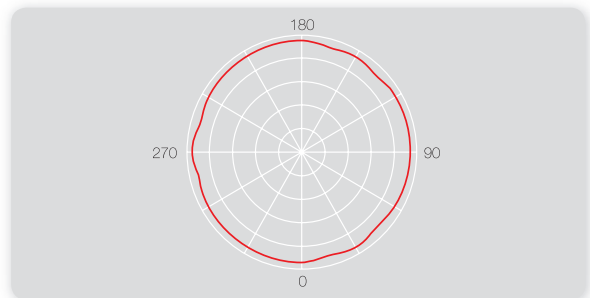
OMNI-NOVA BOSS



▲ 144401

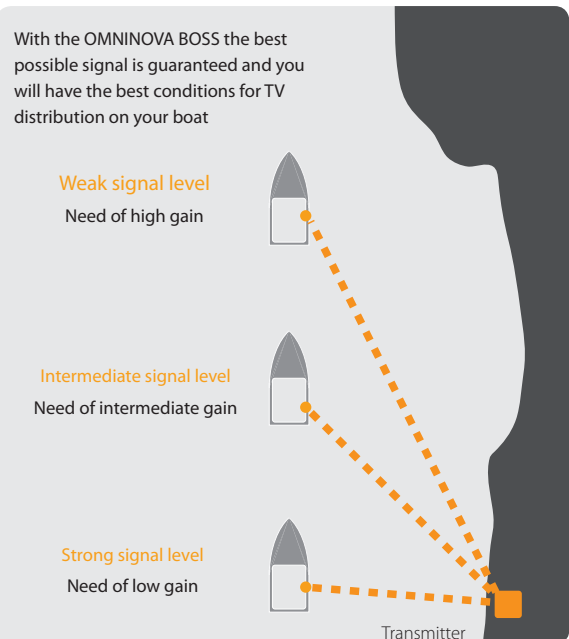
REF.	DESCRIPTION
144401	Omninova BOSS (VHF/UHF) KIT containing: 1 Omninova BOSS antenna 1 PSU with amplifier remote control 1 Antenna control module 1 Car lighter adapter 1 Male/Female extension cable (1,5 m) 1 Shielded IEC-type connector 1 F-type connector

RADIATION PATTERN

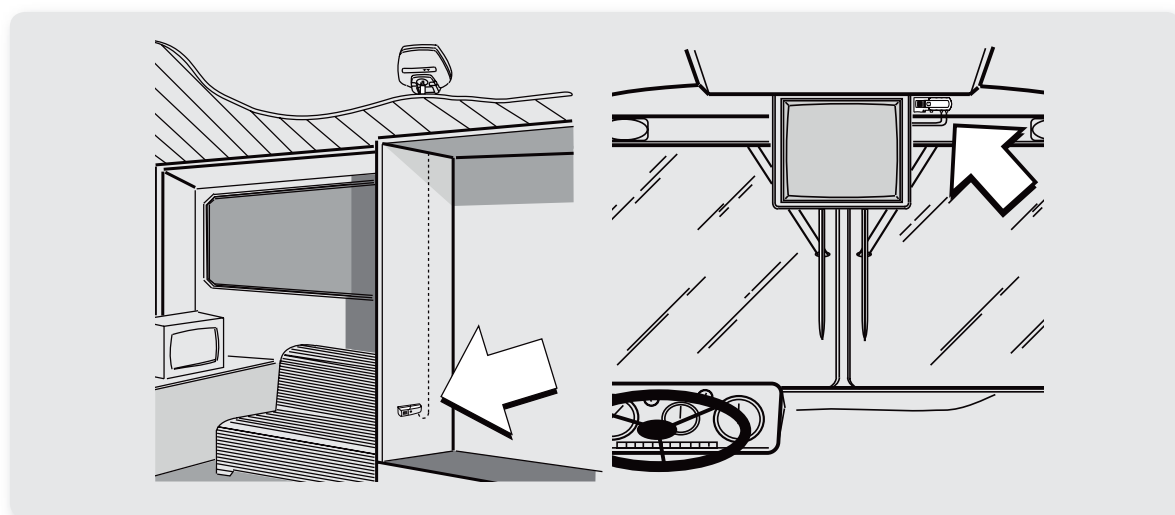
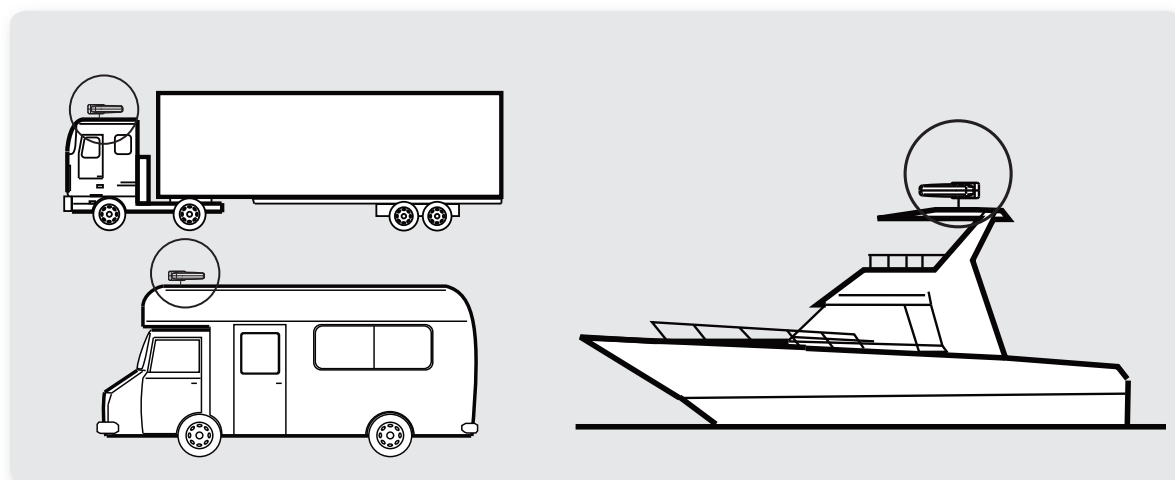
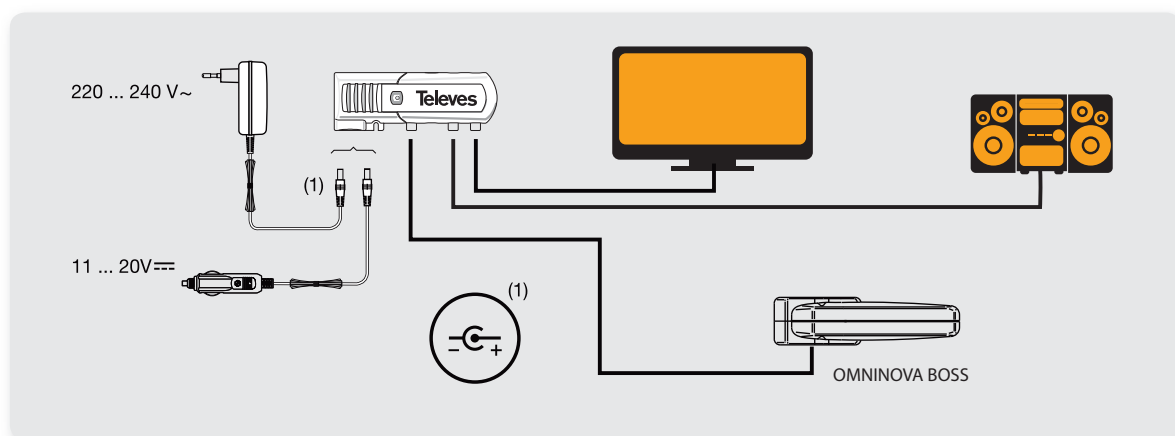


Reference		144401	
Polarization		horizontal	
Boss-Tech		ON	OFF
Gain	Band	AM	-1
		BI	26 -2
		FM	20 -3
		BIII	28 -3
		UHF	30 -2
Power	Battery	V _{dc}	11...20
	A/C Adaptor	V _{ac}	100...240
Dimensions(W x H x D)		mm	72 x 290 x 325
IP Prtection Index			53
Windload *	800 N/m ²	N	24
	1100 N/m ²		33
Antenna control module and PSU			
Output voltage		V _{dc}	10 8
Maximum output current		mA	100
Insertion losses typ.		dB	1,5
Protection index		IP	20
Dimensions		mm	145 x 45 x 35
Wind conditions			
Antenna height		m	≤ 20 > 20
Pressure		N/m ²	800 1100
Pressure		Km/h	130 150

* Antenna in horizontal position



OMNINOVA BOSS antenna typical applications





BOSS ANTENNAS: INDOOR

INNOVA BOSS antenna



QR-A00104

- ▶ Indoor antenna with BOSStech automatic adjustment of output signal.
- ▶ Prepared for 4G networks:
 Soon, the frequencies used by DTT will be allocated to mobile telephony 4G (Digital Dividend). This will force users to change once again the settings of their antennas. Thanks to the INNOVA BOSS antenna, prepared for "4G Networks", that change will not be necessary. INNOVA BOSS features a rear switch that allows to switch between normal reception and reception adapted to 4G networks.
- ▶ No orientation needed Conector coaxial CEI.
- ▶ AC/DC adapter included
- ▶ It can be powered remotely via coaxial cable
- ▶ Plug&Play.

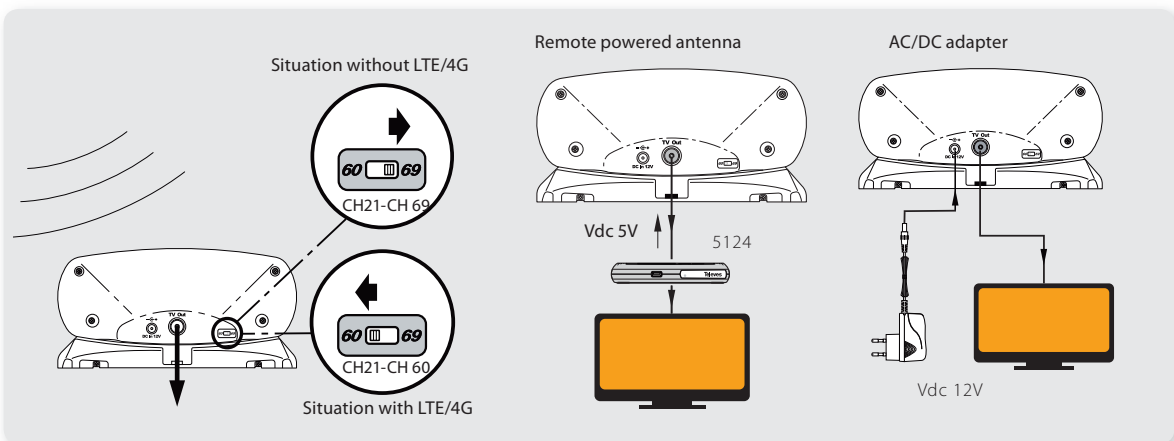
INNOVA_{BOSS}



▲ 130201

REF.	DESCRIPTION
130201	Indoor Innova BOSS antenna (single pack)

Reference		130201	
Switch setting		60	69
Channels		21-60	21-69
Frequency bands	MHz	470...790	470...862
Gain	dBi	25	
Noise figure	dB	3	
Powering voltage	V _{dc}	5 ...12	
Consumption	5 V _{dc}	30	
	12 V _{dc}	45	
Dimensions (W x H xD)	mm	215 x 102 x 105	



INDOOR ANTENNAS

MIRA DVB-T antenna

MIRA DIGITAL



QR-A00008

The Indoor Mira antenna has been **especially designed** for the reception of **terrestrial digital signals**.

- ▶ **Passive or active operation (25dB).**
- ▶ Includes rejecting **filter** for GSM signals.
- ▶ Better image quality in analogue television.
- ▶ IEC connectors.
- ▶ Includes AC/DC adaptor.
- ▶ It can be powered either locally or remotely via coaxial cable.

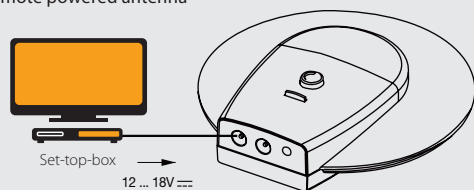


REF.	DESCRIPTION
1301	Mira DVB-T Indoor antenna (single pack)

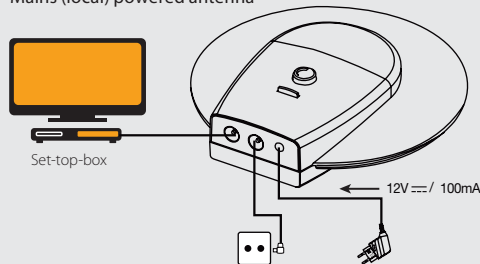
▲ 1301

Reference		1301
Operating band		21-69
Gain	dB	25
Noise figure		2,5
Powering voltage	V _{dc}	12
	V _{ac}	230
Consumption	ON	75
	OFF	8
Protection index	IP	20
Dimensions	mm	213 x 51 x 217

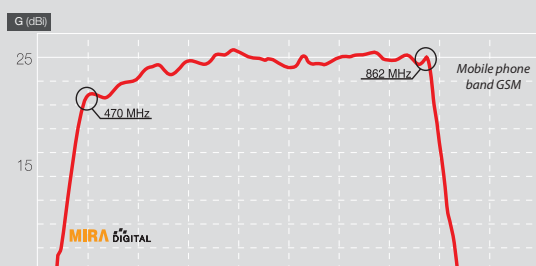
Remote powered antenna



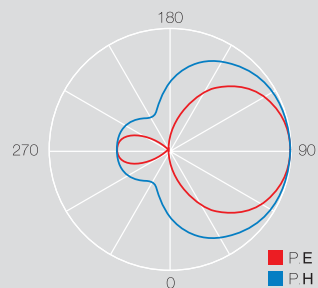
Mains (local) powered antenna



FREQUENCY RESPONSE



RADIATION PATTERN



ACCESSORIES FOR BOSS ANTENNAS

Amplifiers and power supply units



QR-A00130

- ▶ NanoKom Series: Domestic amplifiers 12Vdc - 150mA. (Ref. 562701, 562711, 562702, 562712, 562703, 562713).
- ▶ PicoKom 790 Series: domestic amplifiers 12Vdc - 150mA. (Ref. 560541, 560542, 560543).
- ▶ PicoKom Series: Domestic amplifiers 12Vdc - 150mA. (Ref. 5605, 560510).
- ▶ PicoKom Series: Power Supply Units: 12Vdc-200 mA. (Ref. 579401). 24Vdc-130 mA. (Ref. 5795).
- ▶ Power Supply Units, "F" connectors: 12Vdc-220 mA. (Ref. 550101). 24Vdc-130 mA. (Ref. 5504).



▲ NanoKom Series



▲ Power Supply Units, "F"



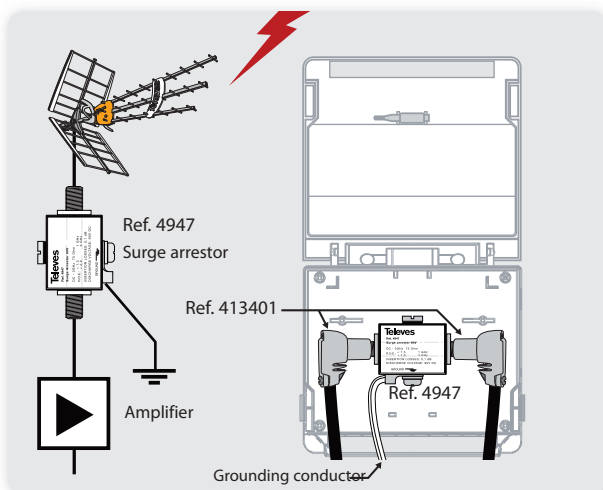
▲ PicoKom Series

Surge arrestor



QR-A00045

REF.	DESCRIPTION
4947	Surge arrestor 90V



▲ 4947

Reference		4947
Frequency range	MHz	0-3000
Insertion losses	dB	0,1
Discharge voltage	V _{dc}	90
Connectors	type	F
Impedance	ohm	75
Dimensions (W x H x D)	mm	72 x 41 x 21

FM & VHF ANTENNAS

FM Antenna



QR-A00007

- ▶ Folded dipole in a circular structure.
- ▶ **Omnidirectional** radiation pattern.
- ▶ **Integrated Balun** in the junction box (F Connector).
- ▶ Made of (stainless) aluminium for long life.

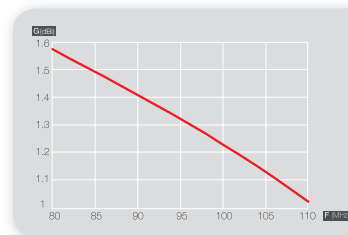


▲ 1201

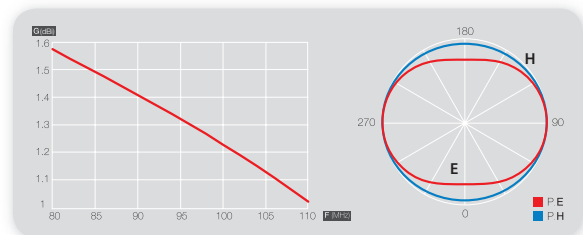
REF.	DESCRIPTION
1201	FM Antenna (single pack)

Reference	1201		
Operating band	FM		
Gain	dBi	1	
Front-to-Back ratio	dB	0	
Length	mm	500	
Wind load	800 N/m ²	N	27
	1100 N/m ²		37
Wind load			
Antenna height	m	≤ 20	> 20
Wind pressure	N/m ²	800	1100
Wind speed	Km/h	130	150

FREQUENCY RESPONSE



RADIATION PATTERN



VHF-DAB Antenna



QR-A00004

Yagi style antennas for Band III reception, composed of a reflector, a folded dipole and directional elements.

- ▶ **Integrated Balun** in the junction box (F Connector).
- ▶ Made of (stainless) aluminium for long life.

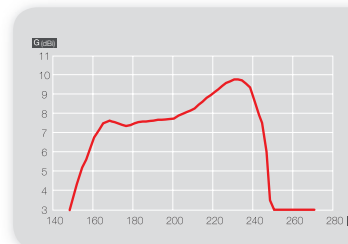


▲ 1065

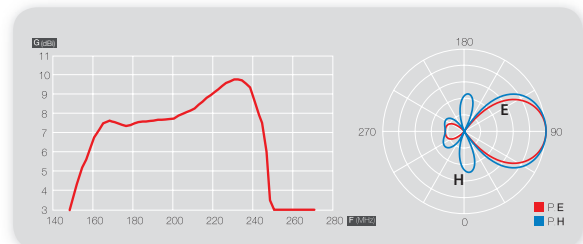
REF.	DESCRIPTION
1065	BIII Antenna (5 units/pack)
106501	BIII Antenna (single pack)

Reference	1065/01		
Channels	5-12		
Gain	dBi	9,5	
Front-to-Back ratio	dB	20	
Length	mm	1460	
Wind load	800 N/m ²	N	71
	1100 N/m ²		97,7
Wind conditions			
Antenna height	m	≤ 20	
Wind pressure	N/m ²	800	
Wind speed	Km/h	130	

FREQUENCY RESPONSE



RADIATION PATTERN



DAB & VHF/UHF MIX ANTENNAS

DAB Antenna



QR-A00003

- ▶ Especially designed for DAB reception (Digital Audio Broadcasting).
- ▶ **Integrated Balun** in the junction box (F Connector).
- ▶ Made of (stainless) aluminium for long life.



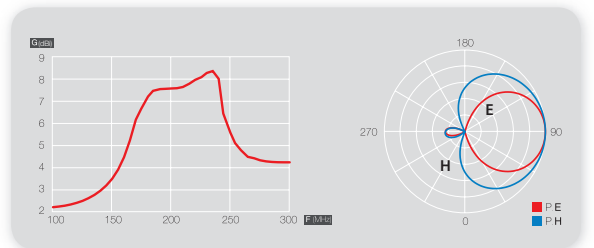
▲ 1050

REF.	DESCRIPTION
1050	DAB Antenna (single pack)

Reference		1050	
Operating band		DAB/BIII	
Gain	dBi	8	
Front-to-Back ratio	dB	>15	
Length	mm	555	
Wind load	800 N/m ²	N	36,5
	1100 N/m ²		50,2
Wind conditions			
Antenna height	m	≤ 20	> 20
Wind pressure	N/m ²	800	1100
Wind speed	Km/h	130	150

FREQUENCY RESPONSE

RADIATION PATTERN



Combined VHF / UHF Antenna



QR-A00002

- ▶ The 1030 is a logarithmic antenna composed of a number of active dipoles, each of them tuned to a different frequency. The result is a broadband antenna
- ▶ **Integrated Balun** in the junction box (F Connector).
- ▶ Made of (stainless) aluminium for long life



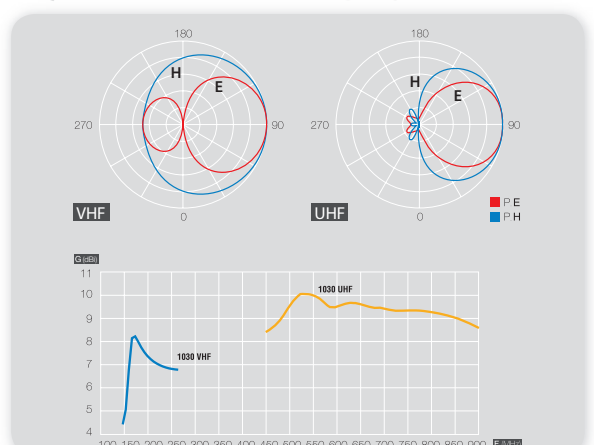
▲ 1030

REF.	DESCRIPTION
1030	VHF/UHF Mix Antenna (10 units/pack)

Reference		1030	
Channels	VHF	5-12	
	UHF	21-69	
Gain	VHF	dBi	8,5
	UHF		10
Length	mm	900	
Wind load	800 N/m ²	N	33,6
	1100 N/m ²		46,2
Wind conditions			
Antenna height	m	≤ 20	> 20
Wind pressure	N/m ²	800	1100
Wind speed	Km/h	130	150

FREQUENCY RESPONSE

RADIATION PATTERN





QR-A00009

V HD 790 Antenna

- ▶ Antenna designed for optimal rejection to LTE band while maintaining reception characteristics in the UHF band.
- ▶ Equipped with "Double U Dipole" as on the DAT HD for flat frequency response.
- ▶ 10 Elements dihedral angled reflector.
- ▶ **14 elements distributed through 2 Yagi, vertically stacked and enphased.**
- ▶ Excellent compromise between size and gain of the antenna.
- ▶ **Innovative assembly system for the reflectors guaranteeing easy of use and mechanical stability.**
- ▶ **Integrated Balun** in the junction box (F Connector).
- ▶ Made of (stainless) aluminium for long life



▲ 149101

V HD Antenna

- ▶ Equipped with "Double U Dipole" as on the DAT HD for flat frequency response.
- ▶ 10 Elements dihedral angled reflector.
- ▶ **14 elements distributed through 2 Yagi, vertically stacked and enphased.**
- ▶ **Innovative assembly system for the reflectors guaranteeing easy of use and mechanical stability.**
- ▶ **Integrated Balun** in the junction box (F Connector).
- ▶ Made of (stainless) aluminium for long life



▲ 1490

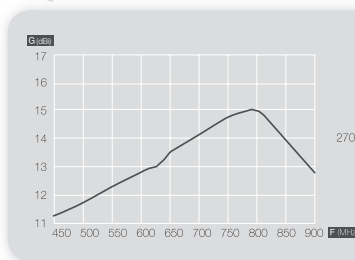
REF.	DESCRIPTION
149001	V HD Antenna (single pack)
1490	V HD Antenna (6 units/pack)
149101	V HD 790 Antenna (single pack)
149102	V HD 790 Antenna (6 units/pack)

Reference		1490 / 149001	149101 / 149102
Channels		21-69	21-60
Gain	dBi	15	
Front-to-Back ratio	dB	23	
Length	mm	890	
Wind load	800 N/m ²	93	
	1100 N/m ²	128	

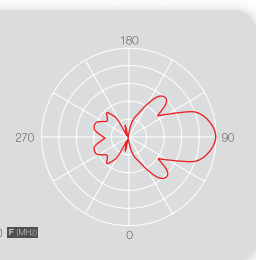
Wind conditions

Antenna height	m	≤ 20	> 20
Wind pressure	N/m ²	800	1100
Wind speed	Km/h	130	150

FREQUENCY RESPONSE



RADIATION PATTERN



UHF ANTENNAS

L 790 type antennas



QR-A00006

- ▶ Yagi antennas featuring **13 directors**, double V dipole and corner reflector.
- ▶ Fully shielded junction box with **balun included** (F connector).
- ▶ Made of (stainless) aluminium for long life.

REF.	DESCRIPTION
112140	L 790 Antenna UHF (6 units/pack) Op
112141	L 790 Antenna UHF (15 units/pack) B

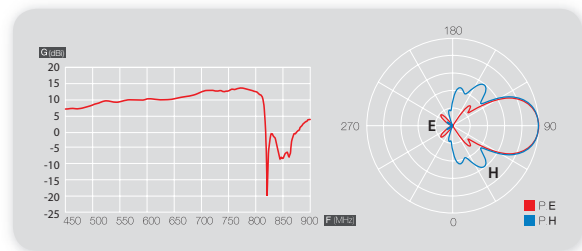
Reference		112140 / 112141
Channels		21-60
Gain	dBi	12
Front-to-Back ratio	dB	26
Length	mm	1180
Wind load	800 N/m ²	73
	1100 N/m ²	100,3
Wind conditions		
Antenna height	m	> 20
Wind pressure	N/m ²	1100
Wind speed	Km/h	150



▲ 112140

FREQUENCY RESPONSE

RADIATION PATTERN



Panel antenna



QR-A00005

Antenna designed for those cases where the TV signal comes from **several directions**, especially suitable for over-water transmission.

It is composed of 4 dipoles in a vertical pattern and a 12 elements flat reflector panel.

Dipoles are in phase along the line that joins them.

- ▶ Fully shielded junction box with **balun included** (F connector).

REF.	DESCRIPTION
1083	UHF Panel Antena (5 units/pack)

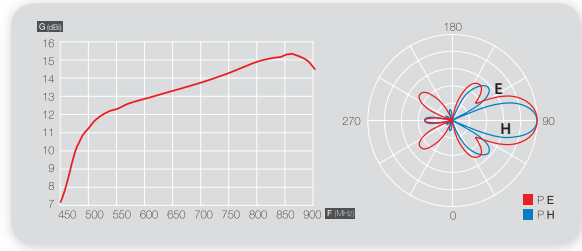
Reference		1083	
Channels		21-69	
Gain	dBi	14	
Dimensions (H x W)	mm	805 x 560	
Front to back ratio	dB	20	
Wind load	800 N/m ²	139	
	1100 N/m ²	191,5	
Wind conditions			
Antenna height	m	≤ 20	> 20
Wind pressure	N/m ²	800	1100
Wind speed	Km/h	130	150



▲ 1083

FREQUENCY RESPONSE

RADIATION PATTERN



Fiberglass fixed antenna



QR-A00075

Antenna base, multipurpose and protected with fiberglass, suitable for all applications in the band considered.

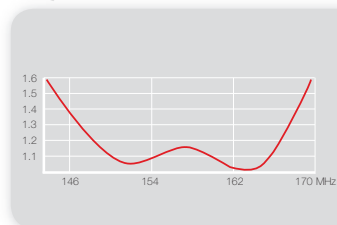
- ▶ N type connector.
- ▶ **Heavy duty base**
- ▶ **Grounding** via stub.
- ▶ Approved for **marine environments**:
Telemar 1
KSR 8050 AO-0185
DUTCH PTT.

REF.	DESCRIPTION
6574	VHF Coaxial Fixed Antenna (150...170 MHz) (single pack)

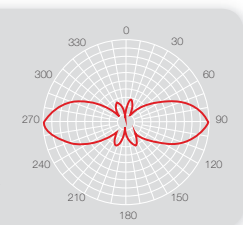
Reference		6574
Operating frequency	MHz	150...170
Radiant element length	mm	1200
Gain	dB _{iso} ⁽¹⁾	3
Power	W	100
Mast diameter	mm	50
Weight	gr	500
Wind speed	Km/h	> 200

(1) Referred to an isotropic radiator

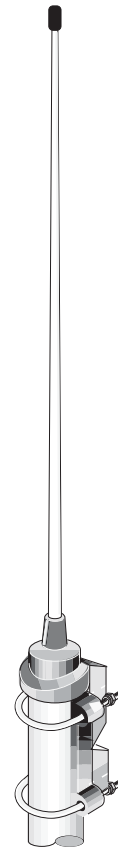
FREQUENCY RESPONSE



RADIATION PATTERN



ROE curve and vertical radiation pattern.



6574

Mobile antennas



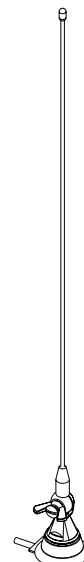
QR-A00076

REF.	DESCRIPTION
6620	1/4 λ FM Band 68...174MHz Antenna
6632	1/4 λ VHF 144...470MHz Antenna

Reference		6620	6632
Operating frequency	MHz	68...174	144...470
Antenna type	λ	1/4	
Power (max.)	W	150	
Construction	material	stainlees steel	
Spring		Inc	-
Length of the radiating element	mm	1150	520
Weight	gr	440	320



6620



6632

MECHANICAL ACCESSORIES

A range of elements intended to support TV reception devices like antennas or dishes, no matter where they are going to be placed: eaves, gable ends, walls, roof, windows, ...etc.

There are many models ready to be mounted by means of either mortar courses or expansion/through/chemical bolts.

All of them feature a surface treated with a dual process, galvanised and reactive sealed, to ensure a long life against rusting.



Masts - RPR / Color / Hot-dip galvanised



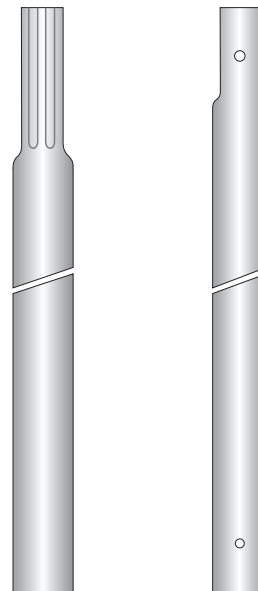
QR-A00030

Protection	Ref.	Fitting type	Length (m)	Diameter ø (mm)	Thickness (mm)		Units/pack
Zn+RPR	3040	grooves	1,5	40	1,25	G	6
	3041	grooves	2	40	1,25	G	4
	2407	smooth	1,5	35	1,5	G	10
	3008	smooth	2,5	35	1,5	G	6
	3042	smooth	2,5	35	1	G	6
	3009	smooth	2,5	40	2	G	4
	3072	smooth	3	40	2	G	4
	3010	smooth	3	45	2	G	4
HDG	301002	smooth	3	45	2	G	4
Zn+P	3075	smooth	3	45	2	Re	4
	307502	smooth	2	45	2	W	4

Zn+RPR: Zinc coating + Reactive Protecting Process

Zn+P: Zinc coating + Painting with electrostatic spray (red or white) powder cured in oven.

HDG: Hot-dip galvanizing



▲ 3040

▲ 3008

Supplements and brackets

A large range of brackets to install masts in chimneys or walls. Brackets can be for bolting or embedding, with varied dimensions to avoid obstacles, as eaves.



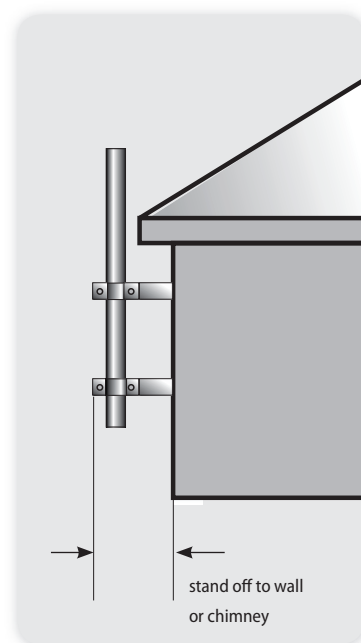
QR-A00028

REF.	DESCRIPTION	Protection	Stand off (mm)
Clamps			
2117	Mast clamp for window	Zn+RPR	586
Brackets for chimney			
2414	Tubular	Zn+RPR	200
2415	Tubular reinforced	Zn+RPR	235
Brackets for bolting			
2401	"L" Mast bracket + "U-bolt"	Zn+RPR	300
2403	"W" Mast bracket + "U-bolt"	Zn+RPR	250
2404	"U" Mast bracket + "U-bolt"	Zn+RPR	500
2409	Angled mast bracket + "U-bolt"	Zn+RPR	128
2083	"∩" swivelling bracket	HDG	245
Brackets for embedding			
2405	"I" mast bracket + "U-bolt"	Zn+RPR	350
2406	"U" reinforced mast bracket + "U-bolt"	Zn+RPR	500
2410	"U" reinforced mast bracket + "U-bolt"	Zn+RPR	250


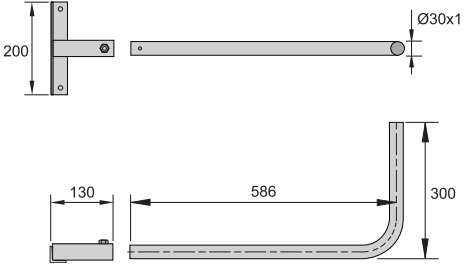

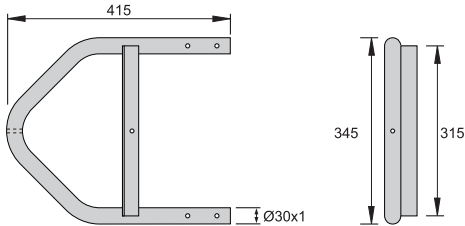

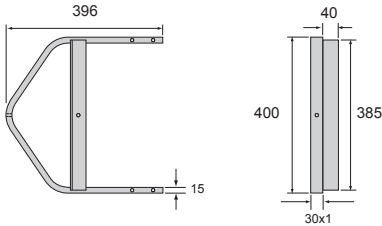

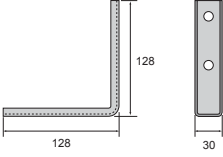

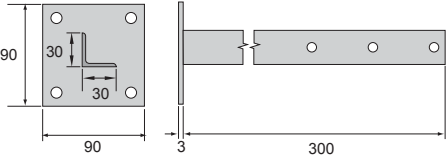

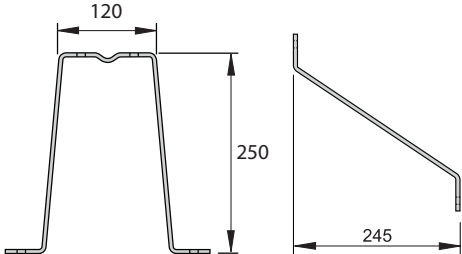
Zn+RPR: Zinc coating + Reactive Protecting Process.

Zn+P: Zinc coating + Painting with electrostatic spray (red or white) powder cured in oven.

HDG: Hot-dip galvanized.


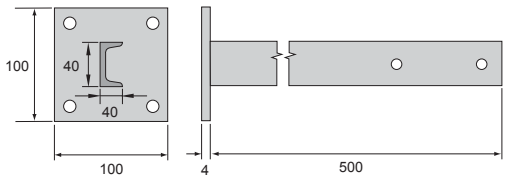

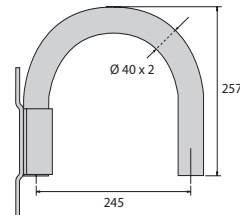

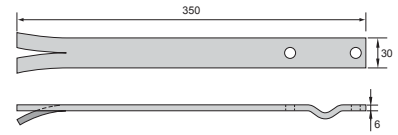

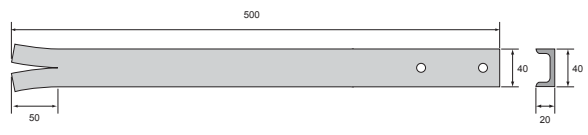

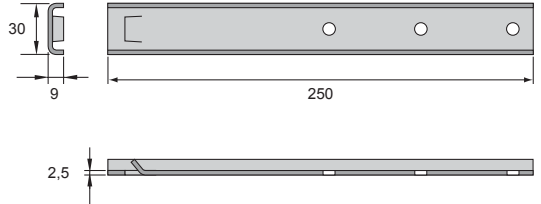


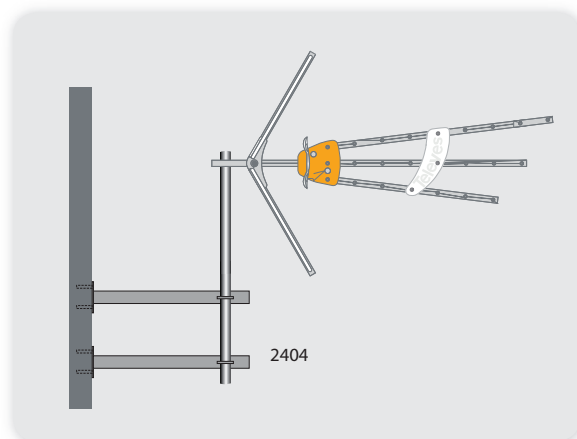
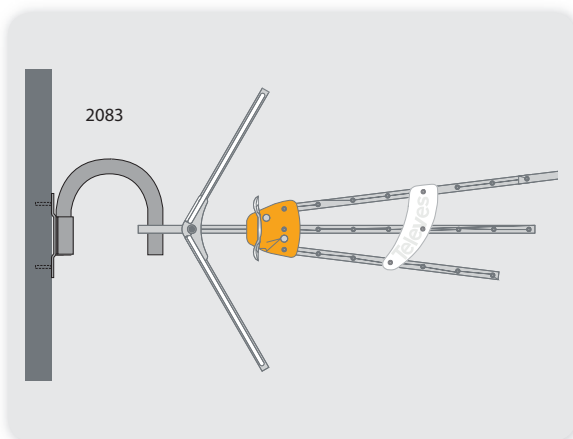
SUPPLEMENTS - BRACKETS

	Reference	Dimensions (mm)
CLAMPS	 <p>2117</p>	 <p>Technical drawing showing dimensions for clamp 2117: 200, 130, 586, 300, and $\varnothing 30 \times 1$.</p>
CHIMNEY BRACKETS	 <p>2414</p>	 <p>Technical drawing showing dimensions for chimney bracket 2414: 415, 345, 315, and $\varnothing 30 \times 1$.</p>
	 <p>2415</p>	 <p>Technical drawing showing dimensions for chimney bracket 2415: 396, 40, 400, 385, 15, and 30x1.</p>
WALL STANDOFF BRACKETS FOR BOLTING	 <p>2409</p>	 <p>Technical drawing showing dimensions for wall standoff bracket 2409: 128, 128, and 30.</p>
	 <p>2401</p>	 <p>Technical drawing showing dimensions for wall standoff bracket 2401: 90, 30, 90, 3, and 300.</p>
	 <p>2403</p>	 <p>Technical drawing showing dimensions for wall standoff bracket 2403: 120, 250, and 245.</p>

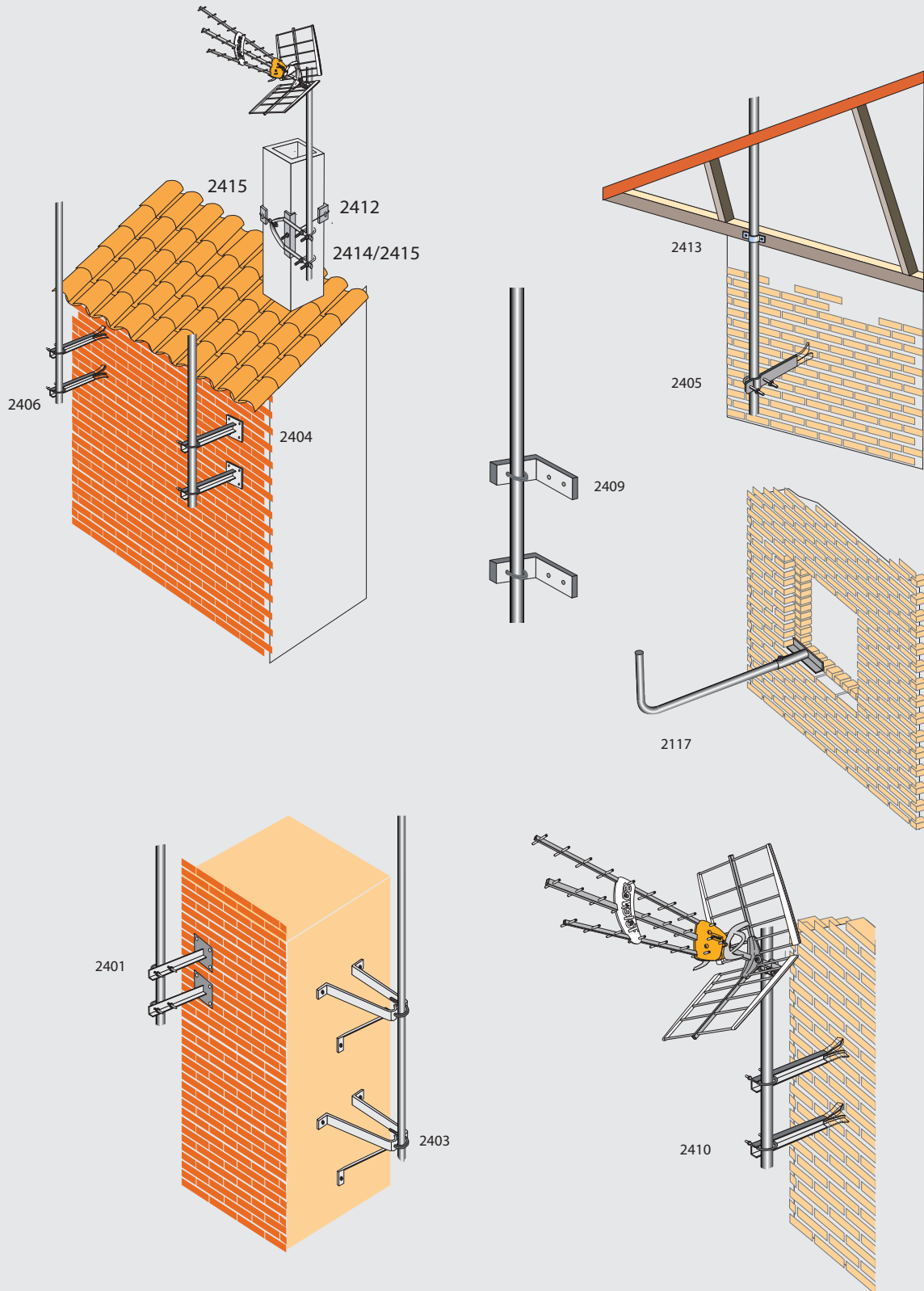
TERRESTRIAL ANTENNAS

SUPPLEMENTS - BRACKETS

	Reference	Dimensions (mm)
WALL STANDOFF BRACKETS FOR BOLTING	 <p>2404</p>	
	 <p>2083</p>	
WALL STANDOFF BRACKETRY FOR EMBEDDING	 <p>2405</p>	
	 <p>2406</p>	
	 <p>2410</p>	



SUPPLEMENTS - BRACKETS



TERRESTRIAL ANTENNAS

COMPLEMENTS - CLIPS - STEEL LASHING WIRES



QR-A00040

REF.	DESCRIPTION	Weight (Kg)
Accessories		
2047	Jaw clamp + "U-bolt" for mast Ø 48 mm	0,14
2408	Saddle & Clamp for guy wire (inner Ø 46 mm)	0,18
2412	Corner piece for chimney	0,045
2413	Mast clamp Ø 35 mm	0,141
4361	Guy wire mounting kit. Consisting of: (1 mast Ø 45mm) flange + 1 clamp + 3 turnbuckle + 6 cable grip + 100 m Ø 2mm lashing wire)	1
Lashing wire		
Length (m)	Ø (mm)	Weight (Kg)
2043	100	2
2044	100	3,2
3034	100	7,7
3059	100	11,5
Cable clips		
Type	Ø (mm)	Weight (Kg)
2000	Opened	0,001
2011	Closed	0,002

Reference	Dimensions (mm)
Ref. 2043 Ref. 2044 Ref. 3034 Ref. 3059	<p>2 0,6</p> <p>Ref. 2043</p>
	<p>2,5 0,8</p> <p>Ref. 2044</p>
	<p>4 1,3</p> <p>Ref. 3034</p>
	<p>5 1,6</p> <p>Ref. 3059</p>

Reference	Dimensions (mm)
<p>2047</p>	<p>110 48 90</p>
<p>2408</p>	<p>46Ø 74 92 52 17</p>
<p>2412</p>	<p>60 31,5 31,5</p>
<p>2413</p>	<p>35 114 30</p>
<p>4361</p>	
<p>2000</p>	<p>20 5,2 2</p>
<p>2011</p>	<p>7,2 30 2</p>