# Televes

# DO IT YOURSELF



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TELEVISION

AUDIO / VIDEO

FIBRE OPTIC

MECHANICAL ACCESSORIES



# Enjoy your camping experience with an intelligent antenna

The BOSS (Balanced Output Signal System) technology makes the antenna intelligent as it optimize automatically the level of TV signal received and also adjust the output level in order to get the best quality in reception.

Certain techn	ical information	Frequency Band	Gain (dBi)	Output Level(dBμV)	Voltage (V)	Consumption (mA)	
OFF	OFF	BIII	0		0	0	
BOSS Tech	OFF	UHF	47	-	0	U	
ON ON	ON	BIII	10	Auto	1224	32 (12Vdc)	
	ON	UHF	1922	Auto	1224	42 (24Vdc)	





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# **Televes**®

# TECHNOLOGICAL DEVELOPMENT IN SEARCH OF EXCELLENCE

Televes is a world renowned brand in the development and manufacture of equipment for the reception, distribution and measurement of radiotelevision signals, with a wide range of solutions that cover all telecommunications services in the era of digital buildings and homes. Founded in 1958, Televes is now the main trademark within a multinational corporation structure that sends products to more than a hundred countries in five continents, thanks to an extensive logistics distribution network, including ten international subsidiaries that have local warehouses for quick to market unplanned deliveries of final goods, as well as the sectors most complete technical assistance and customer support.

The firm is recognized worldwide for the orange satellite dishes that sky about building roofs, but beyond this typical company icon, Televes brand is appreciated by the installers and professional data and television services integrators as a guarantee for quality, advanced technology and technical support. The company has launched more than 1500 different products, an achievement only possible to companies that have a innate "passion for manufacturing".







WE TRANSFORM OUR IDEAS INTO TECHNOLOGICAL SOLUTIONS, BY APPLYING

CREATIVITY INNOVATION EXPERIENCE

# CUTTING-EDGE MANUFACTURING PASSION FOR OUALITY

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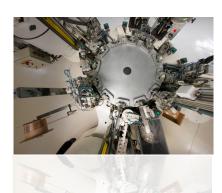
Televes builds its own production facilities, we like to say that we manufacture the manufacturing plant. Our products carry the European Technology Made in Europe identity slogan to explain that the complete process from design to market is done by us. Televes has been a pioneer in our sector by introducting superficial assembly of components and robotized automated lines before any one else knew what it was. Our facilities are ever evolving, having adopted the paradigm of Industry 4.0 to increase our product interaction with market demands, creating a stable and sustainable ecosystem between factory and engineers that is able to create technologies like TForce, the base for the design of a new generation of products with advanced performance. We don't leave anything to chance, to guarantee the maximum quality and durability of our products, Televes has built a Certification Lab where products undergo the toughest tests that ensure top quality over time.

PROCESS AUTOMATION AS A GUARANTEE FOR TOTAL QUALITY

Automation has allowed us to obtain high degrees of flexibility in the manufacturing process, along with a reduction of delivery times. We can adapt to the demands of a market in constant evolution.







OURMODERNPRODUCTIONCENTERSARECHARACTERIZED FOR

AUTOMATION INNOVATION INTEGRATION

# TERRESTRIAL ANTENNAS INTELLIGENT ANTENNAS WITH TFORCE TECHNOLOGY

Televes goes beyond the silicon era into the new era in electronic component design, which allows building integrated circuits that work in the microwave frequency band.

TForce is based on the manufacturing of gallium arsenide (GaAs) semiconductor components, which provides products with functionalities that are difficult to match.

Televes intelligent antennas are designed with BOSS (Balanced Output Signal System). Don't worry about the signal strength, just align the antenna and the BOSS device will **automatically adjust the output signal to the optimum level.** 

Creation of a BOSS with TForce technology, which is based on MMIC components, is an extraordinary milestone in dynamic range optimization.









HIGH DYNAMIC



WIDER DTT COVERAGE AREA



VERY HIGH GAIN



VERY LOW NOISE FIGURE



MANUFACTURED IN EUROPE



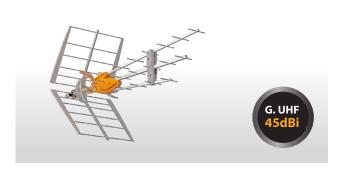
# **TERRESTRIAL ANTENNAS**

### DAT BOSS SERIES WITH TFORCE TECHNOLOGY: OUTDOOR UHF INTELLIGENT ANTENNAS

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DAT BOSS ANTENNA

The first intelligent antenna



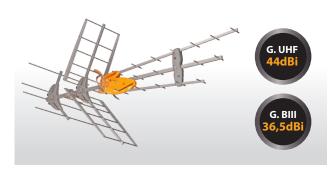
DAT BOSS *LR* ANTENNA

A **Long Range** UHF antenna for extreme reception conditions



DAT BOSS MIX ANTENNA

A combined antenna for UHF and Band III reception



DAT BOSS *MIX LR* ANTENNA



### **NOVA BOSS SERIES: SPECIAL ANTENNAS**

	ANTENNA	RECEPTION TYPE	RECOMMENDED INSTALLATION	HIGHLIGHT
	NOVN	STATIC	Emblematic Places, Facades, Balconies	Low visual impact
CAMPNOVA		STATIC (LONG STAYS)		
1	OMNINOVA	STATIC (SHORT STAYS)	Motorhomes and Boats	No need to be oriented
	TRINOVA	ON THE MOVE	Motorhomes, Boats and Buses	TVMotion complete system (antenna + receiver) able to receive the signal from all the directions and select the best one

# TERRESTRIAL ANTENNAS



a perfect DTT (UHF antenna) or radio (FM antenna) reception.
To guarantee Televes antennas lifetime, these are made of aluminium (stainless material) with its zamak, rustproof and high durable assembly accessories.

The UHF antenna choice must be done as its received signal capability (gain) and directivity.

Within the UHF range, **DAT series**achieve "the intelligence" due to
the BOSS technological inclusion
(Balanced Output Signal System) in the
dipole.

# INTERESTING BACTS

To activate the antenna intelligence (BOSS) you can use a power supply connected to the coaxial cable. Without power supply, the antenna behaves as a high performance passive antenna.

These antennas include a filter against 4G/LTE interferences. Choose your references for, 1st or 2nd Digital Dividend (LTE790 or LTE700).

# **Televes**











#### CHARACTERISTICS

		_		
		REF.	DESCRIPTION	BAND
			<b>"DAT BOSS" Antenna</b> with BOSS intelligence:	UHF: 470698 MHz Channels 21-48
		149941 LTE790	the first intelligent antenna	UHF: 470790 MHz Channels 21-60
	149721 LTE700 "DAT BOSS LR" Antenna		UHF: 470698 MHz Channels 21-48	
		a very high gain antenna for extreme 149740 reception conditions LTE790	, , ,	UHF: 470790 MHz Channels 21-60
Intelligent Antennas	DAT BOSS Intelligent Antennas	149421 LTE700	"DAT BOSS MIX" Antenna	BIII: 174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48
DAT BOSS Int		149441 LTE790	a combined intelligent antenna for BIII and UHF reception	BIII: 174230 MHz Channels 5-12 UHF: 470790 MHz Channels 21-60
		149821 LTE700	<b>"DAT BOSS MIX LR" Antenna</b> a very high gain antenna for BIII and UHF reception in extreme conditions	BIII: 174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48

#### <u>More info</u>

### **DAT Series: Intelligent antennas**

A traditional active antenna incorporates a simple amplifier which can produce saturation problems. Televes BOSS antennas are not active, they are intelligents: BOSS device regulates the gain to avoid any saturation problem and it adapts to signal fluctuations, so output level is always optimal.

Its new design with **TForce technology,** makes this intelligent device even more versatile:

**HIGH DYNAMIC RANGE:** it allows you to receive high-quality TV in a variety of critical situations, from areas where signals ae very weak to installations with high reception levels.

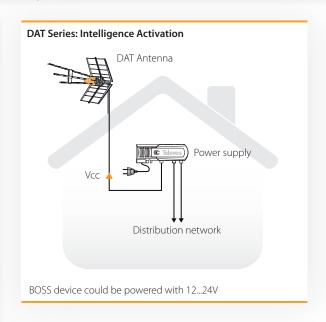
**DTT COVERAGE ENHANCEMENT:** up to 27% higher than older models.





#### **EXAMPLE OF USE**

GAIN (dBi)	LENGHT (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
42 (17 w/o BOSS)	1112		F00 (00 (0	4	8424450185056
45 (17 w/o BOSS)		Box	798x409x69	1	8424450185025
47	1825	Box	1000x425x135	1	8424450185360
(19 w/o BOSS)	1023	DOX	1000x425x155	'	8424450185377
BIII: 36.5 (8.5 w/o BOSS) UHF: 41 (16 w/o BOSS)	1200	Вох	890x411x70	1	8424450185421
BIII: 36.5 (8.5 w/o BOSS) UHF: 44 (16 w/o BOSS)					8424450185391
BIII: 36.5 (8.5 w/o BOSS) UHF: 46 (16 w/o BOSS)	1900	Вох	1020x425x135	1	ТВА





**A MORE STABLE RECEPTION:** it supports signal variations or fading with no effect on the TV installation.

**ÓPTIMAL C/N:** thanks to a noise figure of only 1.2dB that respects the received signal quality.

**VERY HIGH GAIN:** TForce increases the gain of the antenna in 13dB, in UHF and III Band.



# OUTDOOR PASSIVE ANTENNAS



Televes offers a complete range of passive antennas for every reception band: DTT (UHF or BIII antenna) or radio (FM antenna), designed and manufactured in Europe.

They are made of aluminium (stainless material) with his zamak, rustproof and high durable assembly accessories, and the strict quality controls guarantee always the antennas lifetime and reliability.

# INTERESTING RACTS

Zamak is a zinc, aluminium, magnesium and copper alloy which have high hardness, robustness and resistance.

These antennas include a filter against 4G/LTE interferences. Choose your references for, 1st or 2nd Digital Dividend (LTE790 or LTE700).

# **Televes**







#### CHARACTERISTICS

	REF.	DESCRIPTION	BAND
	111942 LTE790	<b>"Yagi Edge" Antenna</b> 19 elements, compact and light	UHF: 470790 MHz Channels 21-60
UHF DTT	149221 LTE700	<b>"V Zenit" Antenna</b> an excellent compromise between size and gain in the UHF reception	UHF: 470698 MHz Channels 21-48
	149201 LTE790	<b>"V Zenit" Antenna</b> with CSG technology (channel selection geometry): end frequency range can be changed thanks to the different position of the elements)	UHF: 470774/782/790 MHz Channels 21- 58/59/60
	REF.	DESCRIPTION	BAND
			ļ.
BIII/UHF DTT	149321 LTE700	<b>"V Zenit MIX" Antenna</b> an excellent compromise between size and gain, in a combined reception (BIII and UHF)	BIII: 174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48
BIII/UHF DTT		an excellent compromise between size and gain, in a combined reception (BIII	174230 MHz Channels 5-12 UHF: 470698 MHz
BIII/UHF DTT		an excellent compromise between size and gain, in a combined reception (BIII	174230 MHz Channels 5-12 UHF: 470698 MHz
BIII DTT	LTE700	an excellent compromise between size and gain, in a combined reception (BIII and UHF)	174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48
BIII/UHF DTT	REF.	an excellent compromise between size and gain, in a combined reception (BIII and UHF)  DESCRIPTION  "V BIII" Antenna a different band III antenna with an in-	174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48 BAND BIII: 174230 MHz
BIII/UHF DTT	REF.	an excellent compromise between size and gain, in a combined reception (BIII and UHF)  DESCRIPTION  "V BIII" Antenna a different band III antenna with an in-	174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48 BAND BIII: 174230 MHz

#### <u>More info</u>

#### V Zenit: Three antennas in one.

CSG Technology (Channel Selection Geometry) is a new concept in the design and manufacture of TV antennas; the antenna can perform as an adjustable filter by means of changing its geometry.



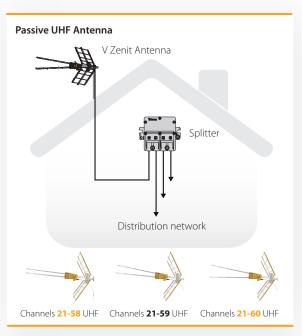
PACKING EXAMPLE OF USE

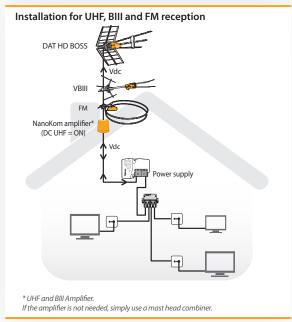
GAIN (dBi)	LENGHT (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
10	695	Вох	723x179x67	1	8424450178942
13	890	Вох	648x299x62	1	8424450184219
15	890	Вох	648x299x62	1	8424450169896

GAIN (dBi)	LENGHT (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
BIII: 8.5 UHF: 13	1056	Вох	898x299x62	1	8424450184226

GAIN (dBi)	LENGHT (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
9	840	Вох	898x344x62	1	8424450182604

GAIN (dBi)	LENGHT (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
1	500	Вох	601x497x92	1	8424450012017



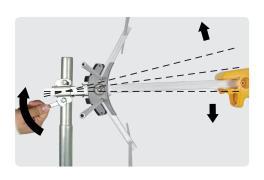


#### A secure and adaptable fixing system.

Outdoors antennas are always under the effects of adverse weather conditions.

That is why these antennas are clamped in one end through a robust fixing system that allows slightly modifications of the tilt of the antenna on the vertical axis.

The reflectors are secured by a system of clamps manufactured in zamak that simplifies the installation and increases the strength of the whole assembly.



# OUTDOOR SPECIAL ANTENNAS



BOSS technology has been included in this type of intelligent antennas and allow DTT reception in specials conditions.

**Outside** range, built with high resistance materials, is characterized by its aesthetic design and discretion; ideal to install in sensitive areas.

Within the static reception antennas range, some models are differentiated due to the environment where the TV signal is going to be received

On the other hand, TVMotion system has been designed to receive the TV signal on the move

# INTERESTING RACTS

Accessories for an easy and simple installation (cables, supports,...) and BOSS activation are included in the product.

All of these antennas include a filter against the 4G/LTE signal interferences.

# **Televes**









#### CHARACTERISTICS

		REF.	DESCRIPTION	BAND
		144144	<b>"DINOVA BOSS" Antenna:</b> low visual impact, ideal for balconies, apartments and facades	FM: 88108 MHz BIII: 174230 MHz UHF: 470790 MHz Channels 21-60
STATIC RECEPTION	Toleves CAIN-NOVA®	144501	"CampNova BOSS" Antenna: enjoy your camping experience with an intelligent antenna. Base was designed to protect and hide the coaxial cable inside the mast or the bracket. Also is compatible with masts up to 30mm of diameter, ideal for caravans.	FM: 88108 MHz BIII: 174230 MHz UHF: 470790 MHz Channels 21-60
	"OMNINOVA BOSS" A omnidirectional antenn receives television with stregardless antenna mo		"OMNINOVA BOSS" Antenna: omnidirectional antenna that can receives television with stable images, regardless antenna movements. Ideal for motorhomes and boats.	AM: 0,15330 MHz BI: 4768 MHz FM: 88108 MHz BIII: 174230 MHz UHF: 470790 MHz Channels 21-60
		REF.	DESCRIPTION	TRINOVA ANTENNA
I THE MOVE		144740 +	<b>"TVMotion" System</b> (Antenna+Receiver): receives signals from different directions (different emitters) and select the best one.	UHF: 470790 MHz Channels 21-60

#### MORE INFO



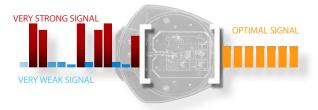
These antennas have been designed to work in intelligent mode (BOSS activated). Device automatically control the level of the received signal (either very high or very low) in order to always ensure an optimal output level.

512501



Gain: 25dB

Ideal for motorhomes, boats and buses.

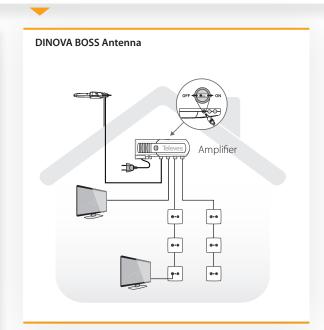


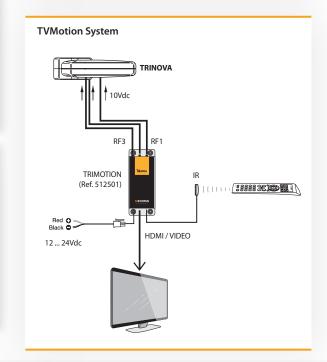


### **EXAMPLE OF USE**

		_			
GAIN (dB)	DIMENSIONS (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
BIII: 10 UHF: 22	450x315x75	Вох	348x369x124	1	8424450178034
BIII: 10 UHF: 22	320x290x107	Вох	332x367x124	1	8424450182864
AM: - BI: 30 FM: 20 BIII: 28 UHF: 30	320x290x107	Вох	348x369x124	1	8424450167199

TRIMOTION RECEIVER	DIMENSIONS (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
High Definition Image HDMI output and composite video	320x290x72 + 256x114x35	2 Boxes	340x367x124 & 326x143x50	1 & 1	8424450177686 & 8424450173565

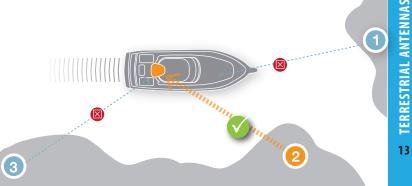




## BEST DTT RECEPTION IN POOR COVERAGE AREAS AND ON THE MOVE

TVMotion receives signals from different locations (boats, buses, caravans, etc.), and from differents locations (transmitters) avoiding those with weak or poor quality and sending the best signal to the receiver every time.





# INDOOR SPECIAL ANTENNAS



BOSS technology has been included in this type of antennas and allow DTT reception indoors.

Plug&Play has been particularly intended to indoor range for an easy and fast installation, where a normal antenna can not be installed







#### CHARACTERISTICS

		REF.	DESCRIPTION	BAND
nt antennas	Televes	130201	"INNOVA BOSS" Antenna: no need to be oriented.	UHF: 470790 MHz Channels 21-60
INDOOR intelligent antennas		130140	High gain <b>"MIRA BOSS" Antenna:</b> It allows to point for complicated recep- tion conditions.	UHF: 470790 MHz Channels 21-60

# INTERESTING BACTS

Accessories for an easy and simple installation (cables, supports,...) and BOSS activation are included in the product.

All of this antennas include a filter against the 4G/LTE signal interferences.

# **Televes**

#### <u>More info</u>

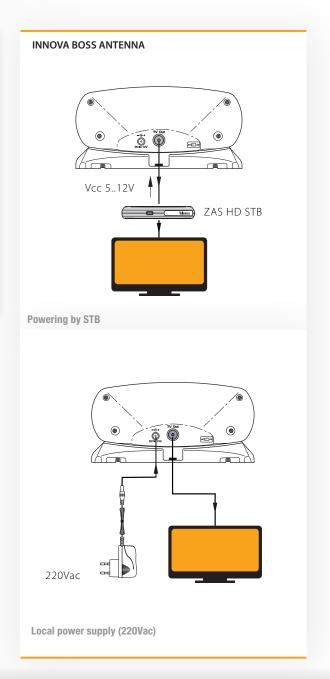
MIRA BOSS antenna, apart from can be used for the reception of the TV signal inside of the house, can be used with other mode.

This mode is called "mixed" and is used in installations which has a collective antenna distribution with the lack of some channel which exists in DTT broadcasts, usually local channels.

In this particular case is enough to insert Mira BOSS between the antenna's outlet and the television. The antenna will receive the missing channels and it will mix them with the one's which already exist, so we could see the whole DTT broadcasts in our TV.



GAIN (dB)	DIMENSIONS (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
30	215x102x105	Вох	222x114x105	1	8424450149430
35	213x51x217	Вох	222x227x61	1	8424450176023



### MIRA BOSS as an indoor antenna



### MIRA BOSS in mixed mode



# SATELLITE DISHES



Satellite dishes usually get installed in roofs. These are perfect places that allow the signal be received in perfect conditions

Protection against rust is very important because it affects directly to the quality of the reflected signal. Thus, aluminium dishes and stainless steel screws have been implemented in both ranges

Satellite dish size depends on the power of the signal that we want to receive.

# INTERESTING RACTS

Satellite operators communicate the emission power of each satellite using a curves called footprints. These allow to choose the necessary minimum dish diameter to receive the satellite signal in a specific geographic area.

Zamak is a zinc, aluminium, magnesium and copper alloy which have high hardness, robustness and resistance.

# **Televes**











#### CHARACTERISTICS

		REF.	MATERIAL	COLOR	SIZE (mm)	STRUCTURE
	names .	7902		0		
Dish	hsid and the state of the state	790204	Aluminium 70202	w	QSD 75:	Reinforced and hot-dip galvanized; pre-assembled and folding arm for an easy
itellite		790202		6	750x850	installation.  The hidden cable routing
QSD SERIES Quality Satellite Dish		790203		R		system simplifies the coaxial cable fixing and improves the looking of the whole.
IES Q	Televes	7903	Aluminium	0	QSD 85: 850x950	The robust back support gives a big stability to whole system
SER (		790304		w		Pre-assembled LNB support adjustable height and made o
150		790302	Ataminiani	6		Zamak. Stainless steel screws.
		790303		R		

		REF.	MATERIAL	COLOR	SIZE (mm)	STRUCTURE
		793001	Aluminium	0		
ish	Televes 793	793002		w	Ø 630: 575x637	High resistance reflector
ISD SERIES mox Satelite Dish	7	793003	Atummum	6		bracket: made of fibreglass.  Hidden cable routing through the arm, made of aluminium.
nox Sat	₹ <b>7</b> ₹ <b>9</b> ₹	793004		R		Robust pole clamp and bracket: made of zamak.
RIES,		793101	Aluminium	0		Flexible LNB holder to fix the converter: made of fibreglass.
DSE	Televes	793102		w	Ø 830: 750x836	Greater mobility with elevation angle from 0 to 90°.
<u>s</u>	7.	793103	Ataminani	6		Stainless steel screws.
	y Riems y Riems & Riems	702107				

#### MORE INFO

### Why should you choose an aluminium satellite dish?

Satellite dish is light and immune against rust.

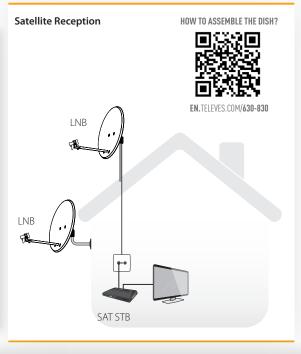
Which range should I choose?	ISD	QSD
Easy mounting	*	***
Robustness	**	***
Durability	**	***
Design	*	***

PACKING EXAMPLE OF USE

GAIN (dBi)	WEIGHT (Kg)	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
					8424450144442
39.0	9.3	Box 8	842x1170x166	1	8424450149706
					8424450146422
					8424450146439
			992x1192x166	1	8424450144459
40.2	10.4				8424450149713
40.2	10.4	Box			8424450146392
					8424450146408



GAIN (dBi)	WEIGHT (Kg)	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
				1	8424450184714
36.2	TBA	TBA Box 7	TDA		8424450184721
00.2			ТВА		8424450184738
					8424450184745
				1	8424450184790
38.8	TBA	. D			8424450184806
30.0	30.0 IBA Box	ROX	TBA		8424450184813
					8424450184820



# Discover the QSD Line: TOP quality.

**QSD Line aluminium dish (Quality Satellite Dish)** is a result of an in-depth analysis about the requirements which a product has to fulfill to resist the adverse weather conditions (sea saltpeper, wind, ...)

The steel back support of the QSD dishes follows an **enhanced process of hot-dip galvanization,** coated in a molten bath of zinc at very high temperatures. The result is a very resistant and stronger material against corrosion and rust.



The QSD dishes have passed the most rigorous safety and quality tests carried out by the TÜV, the German certifying organization

# LNB CONVERTERS TV SAT KITS



LNB (Low Noise Block Down Converter) is the main element installed in the folding dish arm. The LNB is the component which receives the high frequencies from the satellite (GHz) and convert them to low TV frequencies (MHz).

This conversion must be made because the signal need to be adapted to the coaxial bandwidth.

The LNB converter have one (Single), two (Twin) or four (Quad) "F" connector outputs. We will choose the LNB in order to the number of SAT STB inside the home

equipment to set up a FTA (free to air) installation system: dish, LNB, STB with controller, mechanical accessories and connection accessories.

# INTERESTING BACTS

Using waterproof caps with the cable connectors help to protect the LNB from the water.

A Single or a Twin LNB converter allows to receive TV and radio services available in the satellite.

On the other hand, a Monoblock LNB allows to receive 2 satellite services at same time, usually 19.2° E Astra and 13° E HotBird.

# **Televes**





#### CHARACTERISTICS

		REF.	OUTPUTS	FREQUENCIES	NOISE FIGURE(dB)
<b>CONVERTERS</b> LNB		4365	SINGLE: 1 Output (1 Satellite)	Input: 10.7-12.75 GHz Output: 9501950 MHz 11002150 MHz	0.3
CONVER	o se	4332	TWIN: 2 Outputs (1 Satellite)	Input: 10.7-12.75 GHz Output: 9501950 MHz 11002150 MHz	0.3

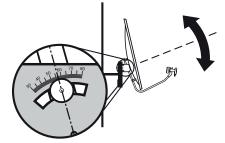
		REF.	DISH	CONVERTER	SAT RECEIVER
ITE KITS	KIT 800 DIGITAL	7506	Ø 800 Steel: 750x836 mm	SINGLE: 1 Output 1 Satellite	Free to air signals (FTA) reception with RF modulator: possibility to distribute the signal through an analog channel generated in UHF band to another outlets in the house.
SATELLI	KIT 800 DIGITAL	7525	Ø 800 Steel: 750x836 mm	MONOBLOCK: 1 Output 2 Satellites (Astra 19.2°E + HotBird 13°E)	Free to air signals (FTA) reception with RF modulator: possibility to distribute the signal through an analog channel generated in UHF band to another outlets in the house.

#### MORE INFO

### Installing a satellite dish..

#### Set the elevation

Elevation angle must be the one which correspond with the place of your house.



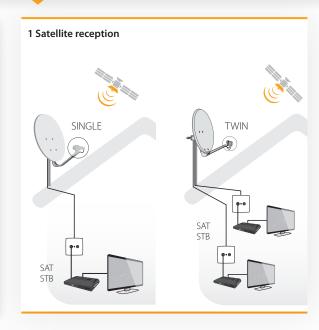
#### Steer the satellite dish

Point the satellite dish to the south and turn it slowly to the east or to the west. This depends on the orbital position and the angle posted in the direction plan.

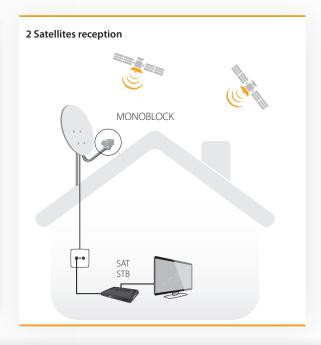


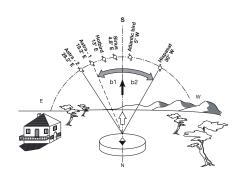
## **EXAMPLE OF USE**

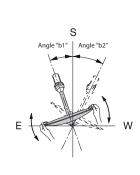
GAIN (dB)	CONSUMPTION (mA)	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
60	90	T1	120x260x58	6	8424450043653
60	170	T2	166x268x67	6	8424450043325



ADDITIONAL ACCESSORIES	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
LNB and Dish support Screws "F" Connectors	Вох	860x770x125	1	8424450075067
LNB and Dish support Screws "F" Connectors	Вох	860x770x125	1	8424450075258

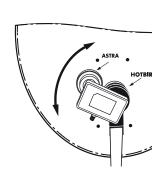






### If you are using a Monoblock LNB...

You must aim by the HotBird side 13° and turn the LNB like the image shows.



# LTE/4G FILTERS MAST MIXER



Filters **prevent LTE 790 / 4G** signals through the active elements in the installation which could be affected. Televes filters offer a huge range of solutions according to the frequency band that is used.

**Cut off frequency choice** must be according to DTT channels, meanwhile the format depends on the installation place of the filter (inside or outside) and in the type of connector.

Mixer combines different signals from several antennas. It has a plastic enclosure which protect it from the weather conditions, it is usually installed in the same mast as the antennas.

# INTERESTING RACTS

easyF format does not need connectors. The installation is easy, cheap and fast.

Filter's role in the installation is not only about the interferences, its specifications must be very detailed to not reduce the DTT range of frequencies.

**Televes** 



#### CHARACTERISTICS

	REF.	FREQUENCY BANDS	INSTALLATION	CONNECTOR TYPE
	405101	UHF: 470774 MHz Channels 21-58	OUTDOOR	EasyF
	405402	VHF/UHF: 47782 MHz Channels 21-59	OUTDOOR	EasyF
	405401	VHF/UHF: 47790 MHz Channels 21-60	OUTDOOR	EasyF
Tistovés	403101	UHF: 470774 MHz Channels 21-58	IND00R	F
Heliovés	403402	VHF/UHF: 47782 MHz Channels 21-59	IND00R	F
nelavés	403401	VHF/UHF: 47790 MHz Channels 21-60	IND00R	F
Televes	404411	UHF: 470774 MHz Channels 21-58	IND00R	IEC
	404412	VHF/UHF: 47790 MHz Channels 21-60	IND00R	IEC

		REF.	FREQUENCY BANDS AND MIXED BANDS	INSTALLATION	CONNECTOR TYPE
ERS		433401	3 Inputs: VHF: 47254 MHz UHF1: 470790 MHz UHF2: 470790 MHz	OUTSIDE	EasyF
WIX	The state of the s	434001	2 Inputs: MATV: 5790 MHz SAT: 9502150	INSIDE	F

#### MORE INFO

REF.		405101	405402	405401	403101 / 404411	403402
Frequency range	MHz	470 774			470 774	47 782
Through loss at the edge of the frequency range	dB				1	
Rejected frequency range	MHz	791	. 862	793 862		791 862
Attenuation in the rejected band	dB	>25	>25	>20	>25	>25
Protection Index	IP		23			20
Dimensions	mm	88x79x42			64x34x22.5	
Weight	ar		220	•		80

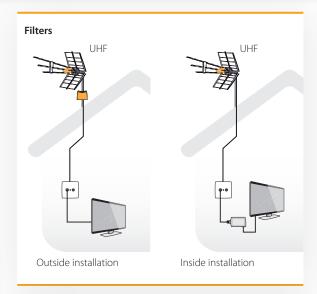


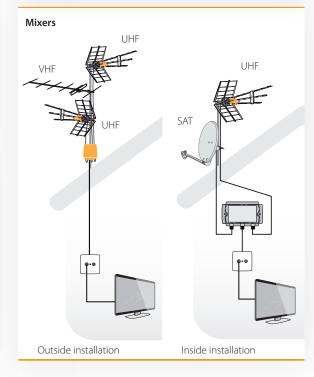
# PA

CKING	EXAMPLE OF US

REJECTION	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
MEDIUM	Вох	126x95x45	10	8424450154588
HIGH	Вох	90x81x45	10	8424450168448
HIGH	Вох	90x81x45	10	8424450154595
MEDIUM	Вох	80x36x25	10	8424450154564
HIGH	Вох	80x36x25	10	8424450179017
HIGH	Вох	80x36x25	10	8424450154571
MEDIUM	B3 Bag	122x78x30	10	8424450167823
HIGH	B3 Bag	122x78x30	10	8424450167830

DC PASS	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
UHF1: 100 mA max.	T1	120x260x52	10	8424450183168
SAT: 1000 mA max.	ТВА	ТВА	ТВА	8424450183175





403401 / 404412	
47 790	
793 862	
>20	

REF.	ŧ.				434	4001
Mixed Bands		VHF	UHF1	UHF2	MATV	SAT
Frequency range	MHz	47 254	47 790	47 790	5 790	950 2150
Insertion losses	dB	1	Ľ.	5	4	2
Isolation between inputs	dB	>40 (VHF-L	>40 (VHF-UHF) / >18 (UHF1-UHF2)		>20	
DC pass (max.)	W					
Protection Index	IP	23 20		23		20
Dimensions	mm	88x79x42		98x	75x27	
Weight	gr		220		2	20

# MAST AMPLIFIERS WITH POWER SUPPLY





Mast amplifier main function is amplify
the signal received by the antenna
without losing signal quality.
Generally it is installed close to the
antenna (in the mast) to avoid degradation
and also an effective amplification.

This product range is characterized by a **low noise figure** (around 1 dB) which quarantees a high quality in DTT signal.

Power supply unit (PSU) must be installed indoor, plugged into the electrical network. It sends the electrical current to the outdoor amplifier through the coaxial cable which is used to carry the TV signal from the antenna to the television.

# INTERESTING FACTS

The amplifier has a switch to activate DC pass, to share the electrical current with an upper intelligent antenna (BOSS).

Automatic PSU manufacture is subjected to a very restrictive safety standards, it is installed indoors. So, can be accessible by children and short circuits must be avoided.

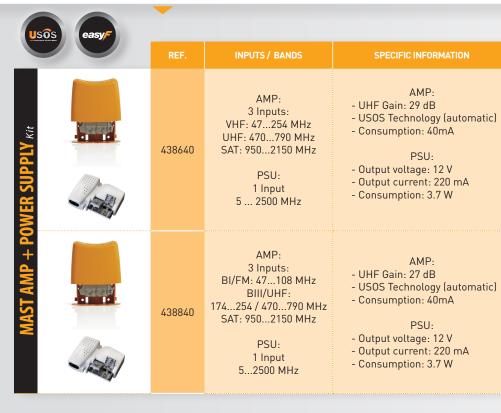
# **Televes**







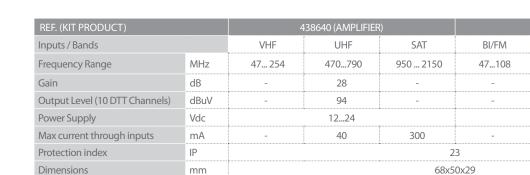
#### CHARACTERISTICS



	REF.	FREQUENCY RANGE	SPECIFIC INFORMATION
POWER SUPPLY	550402	1 Input: 5862MHz	- Output voltage: 24 V - Output current: 130 mA - Consumption: 3.6 W - 2 outputs

#### MORE INFO

Weight

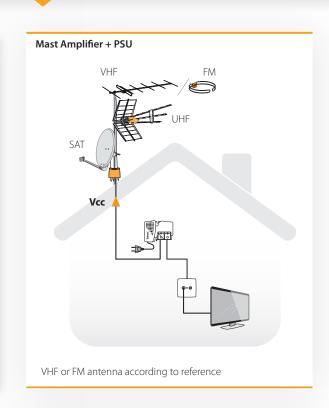


150

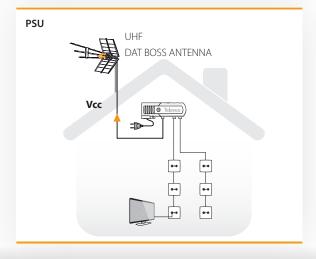


PACKING EXAMPLE OF USE

INSTALLATION	CONNECTOR TYPE	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
AMP: OUTDOOR PSU: INDOOR	EasyF	T1	120x260x54	8	8424450175019
AMP: OUTDOOR PSU: INDOOR	EasyF	Τ1	120x260x54	8	8424450175026



INSTALLATION	CONNECTOR TYPE	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
INDOOR	F	T1	120x260x40	8	8424450141885



438840 (AMPI	LIFIER)
BIII / UHF	SAT
174254 470790	9502150
20 / 27	-
-/94	-
1224	
40	300
	-
	***************************************

REF. / KIT PRODUCT		438640 / 438840 (PSU)	550402
Outputs		1	2
Frequency Range	MHz	5862	52400
Insertion losses	dB	1.5	1.5 (1 output) / 4 (2 outputs)
Mains voltage (50/60Hz)	Vac	196264	
Output level	Vdc	12	24
Output current	mA	220	130
Protection index	IP	2	0
Dimensions	mm	86x65x26	145x45x35
Weight	gr	130	220

# DOMESTIC AMPLIFIERS



Generally, these amplifiers are made to increase the number of outlets in a distribution network, draw from an outlet which already exists. TV output offers a lower gain that allow to connect it directly to the television.

The switched power supply is compact and has a **very low consumption** (50% less than standard amplifiers) and it helps to respect the environment.

With an **attractive appearance** adapted to the room installation, these amplifiers are shielded against interferences.

This range offers multiple options to choose the correct product depending on each installation: "F" or "IEC" (9.52) connector different number of outputs, w/o return channel and capacity to distribute SAI frequencies

# INTERESTING RACTS

Due to interior installation of amplifiers, automatic manufacture is subjected to a very restrictive safety standards. So, can be accessible by children and short circuits must be avoided.

Televes amplifiers could be used as compact headers, keep in mind the coaxial cable length.

# **Televes**



#### CHARACTERISTICS

"LTE READY	REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
	552740	VHF/UHF: 47790 MHz	1 Output: 1 Standard	IEC
Mana	552840	VHF/UHF: 47790 MHz	3 Outputs: 2 Standard + 1 TV Output	IEC
La Lange	552240	VHF/UHF: 47790 MHz	3 Outputs: 2 Standard + 1 TV Output	F
MATV	552940	VHF/UHF: 47790 MHz	5 Outputs: 4 Standard + 1 TV Output	IEC
Laco	552340	VHF/UHF: 47790 MHz	5 Outputs: 4 Standard + 1 TV Output	F
Loco	5531	VHF/UHF: 47862 MHz	6 Outputs: 6 Standard	F

		REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
	11111	553301	Return Channel: 530 MHz VHF/UHF: 47862 MHz	1 Output: 1 Standard	F
tworks	0000	553501	Return Channel: 530 MHz VHF/UHF: 47862 MHz	1 Output: 1 Standard	F
Cable Networks	0000	5525	Return Channel: 565 MHz VHF/UHF: 88862 MHz	3 Outputs: 2 Standard + 1 TV Output	F
CATV	0000	5520	Return Channel: 565 MHz VHF/UHF: 88862 MHz	3 Outputs: 2 Standard + 1 TV Output	F
	10000	5526	Return Channel: 565 MHz VHF/UHF: 88862 MHz	3 Outputs: 2 Standard + 1 TV Output	F

	REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
NATA	5530	Return Channel: 530 MHz VHF/UHF: 47862 MHz SAT: 9502150 MHz	3 Outputs: 2 Standard + 1 TV Output	F

#### MORE INFO



REF.		552740	552840	552240	552940
Frequency range	MHz			47790	
Gain	dB	25	20 (12 @TV) 16 (11 @		
Gain Adjustment	dB		12		
Ouput Level(DIN45004B)	dBuV	112		06	102
AC Consumption	W				2
Protection Index	IP				
Dimensions	mm		145x45x35		
Weight	gr				

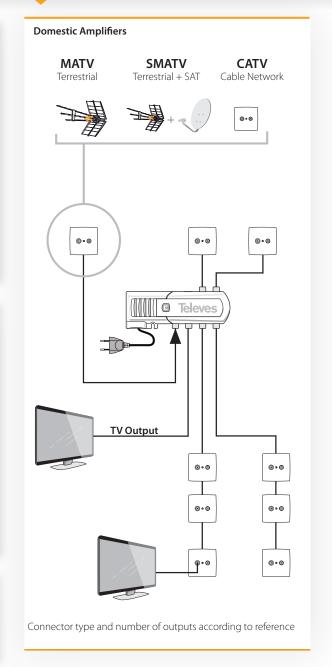


## **EXAMPLE OF USE**

GAIN	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
25dB	T1	120x260x40	8	8424450170458
20 dB TV Output: 12 dB	T1	120x260x40	8	8424450170595
20 dB TV Output: 12 dB	T1	120x260x40	8	8424450170588
16 dB TV Output: 11 dB	T1	120x260x40	8	8424450170625
16 dB TV Output: 11 dB	T1	120x260x40	8	8424450170601
16 dB	T1	120x260x40	8	8424450119396

GAIN	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
24 dB Return Channel: Passive	T1	120x260x40	8	8424450122112
34 dB Return Channel: Passive	T1	120x260x40	8	8424450122136
18 dB TV Output: 12dB Return Channel: Passive	T1	120x260x40	8	8424450055250
20 dB TV Output: 13 dB Return Channel: Passive	T1	120x260x40	8	8424450055205
20 dB TV Output: 13dB Return Channel: 9 dB	T1	120x260x40	8	8424450055267

GAIN	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
MATV: 18 dB, TV Output 10dB SAT: 20 dB, TV Output: 12 dB Return Channel: Passive	T1	120x260x40	8	8424450055304



552340	5531	553301	553501	5525	5520	5526	5530	
	47862	530 / 47862	530 / 47862	565 / 88862	565 / 88862	565 / 88862	530 / 47862 / 9502150	
16 (11 @TV)	16	-/24	-/34	-/18 (12 @TV)	-/20 (13 @TV)	9 / 20 (13 @ TV)	(-/10/12@TV)	
	•	18			12			
102	103	-/112	-/112	-/106	-/107	109 / 107	-/105/110	
		3.	5		2 6			
		20						
145x60x35 145x45x35					145x45x35			
	•	220						

# **SPLITTERS**



Splitters are elements which can distribute the received signal (DTT, Cable or SAT operators) through several outputs. The signal is the same on each splitter output.

This range of products have different connectors types, for an inside installation or a plastic enclosure due to outside installations.

**EasyF** series connector, made in Zamak, has a superior Class A shield against electromagnetic interferences and an ontimal electrical performance

Professional splitters for all installation types (inside or outside).

Inductive splitters (T pattern) are a simple solution to split the TV connector from the outlet.

# INTERESTING FACTS

EasyF connection does not need "F" connectors. This gives rise to time and cost savings, improving connection reliability.

# **Televes**

#### CHARACTERISTICS

easyF	REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	ASSEMBLY	CONNECTOR TYPE
	432803	MATV/SAT: 52400 MHz	2	INSIDE	EasyF
onal splitters	434103	MATV/SAT: 52400 MHz	2	OUTSIDE (enclosure included)	EasyF
EASYF professional splitters	432902	MATV/SAT: 52400 MHz	4	INSIDE	EasyF
	434202	MATV/SAT: 52400 MHz	4	OUTSIDE (enclosure included)	EasyF

		REF.	REQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
<b> E</b> T splitter	节	4320	VHF/UHF	2	IEC: Input : Female Ouput 1 : Female Output 2 : Male
INDUCTIV	节	4322	VHF/UHF	2	IEC: Input : Female Ouput: Male

#### MORE INFO

REF.		432803	434103	432902	434202
Frequency range	MHz		J 11112	2400	
Insertion loss	dB	SA	V: 4.3 T: 4	MATV: 9 SAT: 7.5	
Rejection between outputs	dB	>15		MATV: >17 SAT: >15	
Max Current through Out - In	mA		J.	00	
Max voltage	Vdc		4	10	
Protection Index	IP	20 23		20	23
Dimensions	mm	57x47x13	68x50x29		
Weight	gr	56	135	166	280

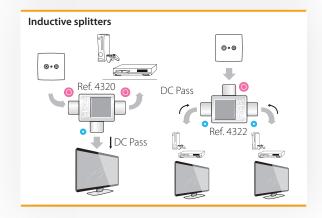


# **EXAMPLE OF USE**

DC BYPASS	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
From the whole outputs to the input	B3 Bag	78x122x19	8	8424450173329
From the whole outputs to the input	T1 Blister	260x120x52	10	8424450170113
From the whole outputs to the input	T1 Blister	120x260x41	8	8424450143551
From the whole outputs to the input	T1 Blister	120x260x40	8	8424450143575

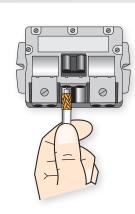
Professional splitters
Indoor mounting
© ⊗ ⊙ J
Outdoor mounting
5-2400 MHz
Tolores 0.0
0.0
Number of outputs according to reference.

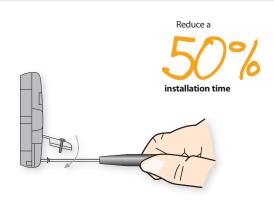
DC BYPASS	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
From input to output number 2 (male)	В1	54x125	10	8424450043202
From the whole outputs to the input	B1	54x125	10	8424450043226



# Discover the connection system







# **OUTLETS** & ACCESSORIES



TV outlet is the **last TV distribution point,** at the entrance it receives the
whole signal and detaches TV signal
(terrestrial or satellite) from FM signal
(radio). Chassis has been designed to
make it easy:

- Coaxial cable connection: conical inner conductor guide, tilting embedded claw and the grab system offers a solid connection without screws.
  - Outlet installation, thanks to the embedded claw to mounting without

# INTERESTING RACTS

Televes outlets admit inner conductors from Ø 0.65 to 1.2 mm which make it compatible with the most common coaxial cables.

Use white face plates (included) to hide the outlet in an aesthetic and elegant way.

# **Televes**

#### CHARACTERISTICS

	REF.	OUTLET TYPE	FREQUENCY RANGE	CONNECTOR TYPE
ellite	4372	END	VHF/UHF: 5862 MHz	TV: IEC Male FM: IEC Female
OUTLETS Radio, Terrestrial TV an Satellite	4373	THROUGH	VHF/UHF: 5862 MHz	TV: IEC Male FM: IEC Female
LETS Radio, Ter	4301	END	VHF/UHF/SAT: 52150 MHz	TV/FM: IEC Male SAT: IEC Female
<b>100</b>	4335	BRIDGED	-	TV: IEC Male FM: IEC Female

		REF.	DESCRIPTION	USE
outlets ACCESSORIES		4336	Back Box	Surface Mounting
outlets ACC	American Topics and	4315	Adjustable Attenuator	TV signal level reduction to avoid problems caused by saturation or a excessive signal level

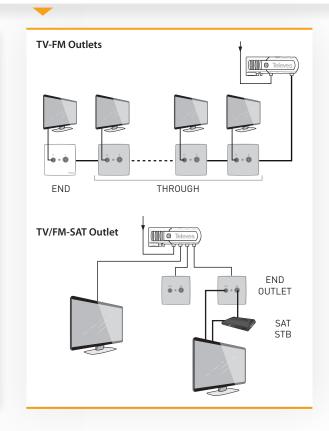
#### MORE INFO

REF.		4372		4373		4301		4335		
Outputs		TV	FM	TV	FM	TV/FM	SAT	TV	FM	
Tap losses	dB	4.5	18	9.5	24	0.6	1.5	<2	2	
Step losses	dB	-		1.3		-		-		
DC current through	mA	N	No		No		SAT -> Input		All	
Dimensions	mm	80x80x7								
Weight	gr	80		8	0	14	Ю	100	0	

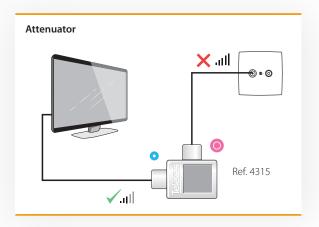


### **EXAMPLE OF USE**

ACCESSORIES	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
White TV-R Face Plate	T1	120x260x41	8	8424450043721
White TV-R Face Plate	T1	120x260x41	8	8424450043738
White TV/R-SAT Face Plate	T1	120x260x41	8	8424450043011
White TV-R Face Plate Surface Mounting Base Screws	T1	120x260x41	8	8424450043356



CHARACTERISTICS	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Screws are included	T1 Blister	268x166x40	10	8424450043363
Adjustment 125 dB IEC connectors (Female input - Male output)	B1 Bag	54x125	10	8424450043158





# **COAXIAL CABLE** & ACCESSORIES





DESCRIPTION





Coaxial cable setting over the wall

or a sharp

Remove sheath and braid from a

coaxial cable to setting up the connectorization





**Copper inner conductor (Cu),** offers low electrical resistence and excellent response to low and high frequencies.

The shield capability against interferences is due to the braid and the foil. Class A+ cables are the best ones against interferences, they are made with a triple shield (braid + 2 foils)

These cables have the best protection against LTE/4G and other interferences

#### Inner conductor: SK2000+ Triple, Class A+ copper 4138 Braid: Tinned copper 18VAtC Braid coverage: 82% (98% Cu) Inner conductor: SK2003+ Triple, Class A+ copper 414001 18VAtC Braid: tinned copper Braid coverage: 82% Trishiela (98% Cu) Inner conductor: SK110+ Triple, Class A+ copper 413705 Braid: tinned copper 18VAtC Braid coverage: 55% (98% Cu) Inner conductor: SK100+ Triple, Class A+ 413601 copper 18VAtC Braid coverage: 60% Braid: aluminium Inner conductor: SK6F+ Triple, Class A+ 414801 copper-clad steel 19VAtC.A Braid coverage: 60% Braid: aluminium DESCRIPTION 4371 Inner conductor: copper-clad steel Double, Class A 17VAtC.A Braid: aluminium Braid coverage: 77% 435501 DESCRIPTION

Opened clip

Cable Stripper

nteresting bacts



# **Televes**

# Trishield Televes cables: 100% certificated.

Televes Cable Certification center checks each centimeter to detect eventual defects. Certification consists in analize different cable parameters and guarantee:

• Copper quality (generally), from dielectric, foil, braid and sheath.

4360

2162

- Attenuation, electrical DC resistance and length parameters.
- Availability, capability and manufacturing flexibility.



Sheath

**4**138 413705 413601

**4**14001

**4**14801



### **PACKING**

### **EXAMPLE OF USE**

Inner conductor

Dielectric

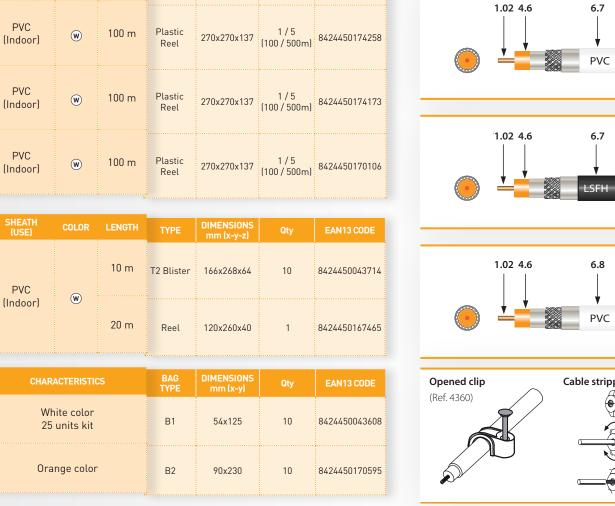
Coaxial cable structure

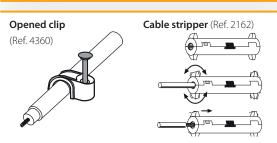
Shielding foil

Braid (outer conductor)

SHEATH (USE)	COLOR	LENGTH	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE		
PVC (Indoor)	w	100 m	Plastic Reel	270x270x137	1 / 5 (100 / 500m)	4031136021917		
LSFH UV resistant (Outdoor)	<b>B</b>	100 m	Plastic Reel	270x270x137	1 / 5 (100 / 500m)	8424450152324		
PVC (Indoor)	w	100 m	Plastic Reel	270x270x137	1 / 5 (100 / 500m)	8424450174258		
PVC (Indoor)	w	100 m	Plastic Reel	270x270x137	1 / 5 (100 / 500m)	8424450174173		
PVC (Indoor)	w	100 m	Plastic Reel	270x270x137	1 / 5 (100 / 500m)	8424450170106		
CHEATH		i.						
SHEATH (USE)	COLOR	LENGTH	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE		
PVC		10 m	T2 Blister	166x268x64	10	8424450043714		

PVC (Indoor)	w	100 m	١	Plastic Reel	270x270x137	1 / 5 (100 / 500m)	8424450170106
CUEATU		•					
SHEATH (USE)	COLOR	LENGTH		TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
PVC		10 m	T:	2 Blister	166x268x64	10	8424450043714
(Indoor)	w	20 m		Reel	120x260x40	1	8424450167465
CHARACTERISTICS			BAG	DIMENSIONS	Qty	EAN13 CODE	
Wh	nite color			TYPE	mm (x-y)		





Final reels are checked one by one so that all of them which are sent to clients have been certificated and checked.



# COAXIAL CABLE LEADS



**Preconnected cable lead** range for different coaxial cables and connectors.

Connection could be type "F", usually used in satellite TV or "IEC" typically used in DTT.

Compression connectors offer a solid an professional cable connection with only one use. Furthermore, PRO EasyF connectors could be removed easily from the cable and without alteration. It allows to make shorter cable leads.

PRO EasyF connectors have a higher shield, Class A+ type, according to the SK2000+ cable (also Class A+)

# INTERESTING RACTS

Cable connectors with higher shield will protect TV signal from LTE/4G interferences emitted by nearest mobile phones.

LSFH cables (Low Smoke Free Halogen) have a fire retardant cover and the smoke is not toxic.

# **Televes**



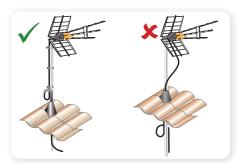
#### CHARACTERISTICS

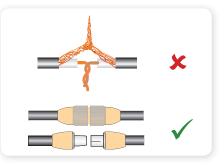
		REF.	CABLE TYPE	CONNECTOR TYPE	SHEATH
	5 5	3851 385101	SK2000+ 18VAtC	F Male-Male	PVC
	<b>4</b> 8'	385102 3852	Trishield	Compression	
	00	385201 385202	SK2000+ 18VAtC Trishield	IEC Male - Female Compression	PVC
Leads	8 8	3853 385301 385302	SK2000+ 18VAtC Trishield	F - "Quick F" Male - Male Compression - PRO EasyF	PVC
hield Cable	88	3854 385401 385402	SK2000+ 18VAtC Trishield	F - IEC Male - Female Compression	PVC
3x SHIELD Trishield Cable Leads	8 8	3856 385601 385602	SK2000+ 18VAtC Trishield	F - IEC Male - Male Compression	PVC
3x SI	3	3858 385801 385802	SK2000+ 18VAtC Trishield	IEC Male - Female Compression - PRO EasyF	PVC
	8	385501	SK2000+ 18VAtC Trishield	F - IEC Male - Female Compression - PRO EasyF	PVC
	8	385701	SK2000+ 18VAtC Trishield	F - IEC Male - Male Compression - PRO EasyF	PVC

	REF.	CABLE TYPE	CONNECTOR TYPE	SHEATH	
Leads	431001	T200+ - 15VRtC	IEC Male - Female	ICEU	
Ple Le	431002	Dual - Shield	PRO EasyF (Class A+)	LSFH	
Cal	4389			PVC	
	4312	Dual - Shield	IEC Male - Female		
S SHIE	4311	Duat - Silletu			
X	4314				

<u>more info</u>

#### Coaxial cable is not an electrical cable. Junction must be made properly.



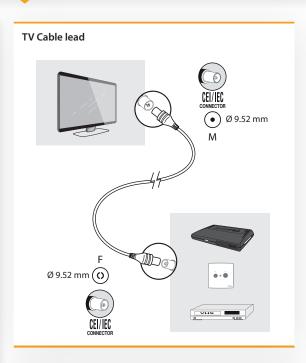


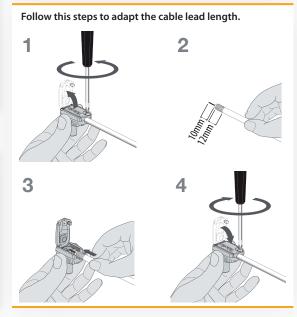


# **EXAMPLE OF USE**

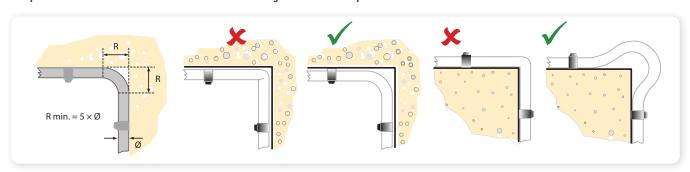
		210			
COLOR	LENGTH	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
	1.5 m			30	4031136022068
w	3 m	В0	200x305	20	4031136022075
	5 m			15	4031136022082
	1.5 m			30	4031136022150
w	3 m	В0	200x305	20	4031136022167
	5 m			15	4031136022174
	1.5 m			30	4031136022198
w	3 m	В0	200x305	20	4031136022204
	5 m			15	4031136022211
	1.5 m		200x305	30	4031136022129
w	3 m	В0		20	4031136022136
	5 m			15	4031136022143
	1.5 m		200x305	30	4031136022099
w	3 m	В0		20	4031136022105
	5 m			15	4031136022112
	1.5 m			30	4031136022228
w	3 m	В0	200x305	20	4031136022235
Ü	5 m			15	4031136022242
w	3 m	В0	200x305	20	4031136022266
w	3 m	В0	200x305	20	4031136022297

COLOR	LENGTH	BLISTER	DIMENSIONS	Qty	EAN13 CODE
	1.5 m	TYPE T1	mm (x-y-z) 120x260x41	8	8424450160541
6	2.5 m	T1	268x166x40	10	8424450160626
w	1.5 m	T1	120x260x41	8	8424450043899
B	1.5 m	T1	120x260x41	8	8424450043127
w	2.5 m	T1	122x166x45	6	8424450043110
В	2.5 m	T1	120x260x41	8	8424450043141





## Keep in mind that coaxial cable has a minimum bending radius to be respected.



# **COAXIAL** CONNECTORS



There are 2 types of connectors in the world of antennas: "F" and "IEC".

Regardless connector type, **shield and a easy mounting system** are the main parameters to choose the connector type.

Televes range offers zamak connectors with a superior shield, simple connectors and ABS plastic connectors (only a little part to avoid deformation or break during the assembly).

# INTERESTING RACTS

Elbowed connector reduces the connection place behind the TV / receiver.

There is a "Quick F" connector also, similar to "F" connector but it can be plugged without screw it.

# **Televes**

#### CHARACTERISTICS

		<b>*</b>					
		REF.	TYPE	MOUNTING	SHIELD		
		437401	IEC Male	PRO EasyF	Class A+		
		437501	IEC Female	PRO EasyF	Class A+		
DTT	OK, OK,	437601	IEC Male + IEC Female	PRO EasyF	Class A+		
IEC		4305	IEC Male	Screw	Standard		
		4303	IEC Female	Screw	Standard		
		4316	IEC Male + IEC Female	Screw	Standard		

	REF.	ТҮРЕ	MOUNTING	SHAPE
ATELLITE	4306	F Male	Screw	Straight
" <mark>-"</mark> 7VS	4317	F Male	Screw	Straight

	REF.	ADAPTER TYPE	MOUNTING
TERS	4307	F Female - F Female	Screw
ADAP	4309	Joint without connectors	Screw

#### MORE INFO

# Know more about *EasyF* connectors:



Professional "PRO EasyF" connectors offer several benefits thanks to "Easy F" assembly:

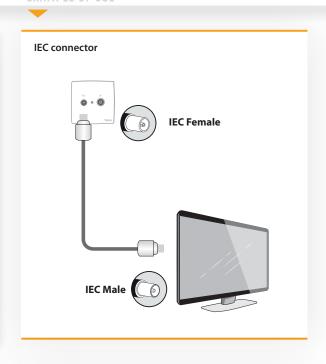
• Easy mounting system. Coaxial cable connection becomes a fast operation in 3 simple moves. With a single screw to grab and close the connector, the cable is strongly assembled ensuring a safe and a reliable connection.





## **EXAMPLE OF USE**

		_			
SHAPE	UNITS PER BAG	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
Elbowed	1 u.	B1	54x125	10	8424450133644
Elbowed	1 u.	B1	54x125	10	8424450133675
Elbowed	2 u. (pair)	B1	54x125	10	8424450133712
Straight	1 u.	B1	54x125	10	8424450043059
Straight	1 u.	B1	54x125	10	8424450043035
Straight	2 u. (pair)	B1	54x125	10	8424450043165



ACCESSORIES	UNITS PER BAG	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
Waterproof cap	1 u.	B1	54x125	10	8424450043066
F	2 u.	B1	54x125	10	8424450043172

SHAPE	UNITS PER BAG	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
Straight	1 u.	B1	54x125	10	8424450043073
Straight	1 u.	B1	54x125	10	8424450043097



- **Shield**. Class A+ protection against interfering LTE / 4G signals.
- **Quality**. Zamak manufacturing with RCP (Reactive Coating Process) which guarantees long durability. Robotic production ensures reliability.



# **AUDIO/VIDEO** & OPTICAL FIBRE



SCART is the most used connection between electronic and multimedia equipment at home.

Nevertheless, HDMI head the list of digital A/V connection. We have a cable (in this range) "High Speed HDMI Cable with Ethernet" which is compatible with 4K technology (UltraHD or UHD).

Optical fibre is currently used in a large number of homes. Fibre optic single patch cord allows you to connect an optical router to an optical outlet. "SC/APC" are the most used connectors between fibre optic devices.

# INTERESTING BACTS

Televes works with HDMI licenses, which is a standard that includes royalties. Its cables respect all the specifications and quality standards of the HDMI certification.

In case that fibre optic must be rolled, it is important to keep a minimum bending radius (8cm).It improves transmission and prevents signal loss.

# **Televes**



	REF.	TYPE	CONNECTOR
	4319	A/V Extender	SCART Male - SCART Male 21 PIN
SCA	4377	A/V Extender	SCART Male - 2RCA Male

	REF.	TYPE	CONNECTOR
OPTICAL FIBRE	433301	Monomode Optic Fibre Patch cord	SC/APC Male - SC/APC Male

#### MORE INFO

## Fibre optic work tips:

- If the patch cord is connected to a laser source do not look directly to both ends.
- Optical signal could be reduced if any scratch, impurity, grease residue or sweat go into the connector so, handle it with caution.
- As a result of the last tips, is advisable to save the protection caps and place it again when the connectors are open.
- If it was necessary to roll the patch cord, it is important to keep a minimum bending radius (8cm for a patch cord). It improves transmission and prevents signal loss.



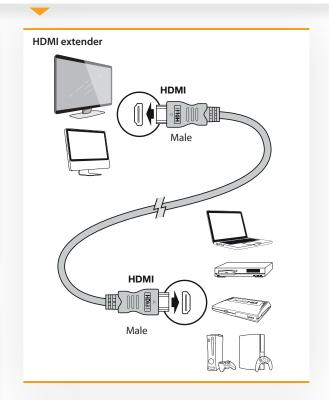


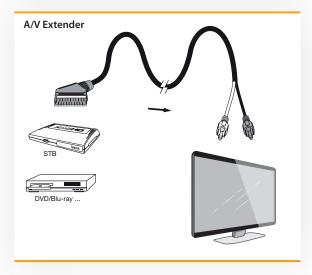
# **EXAMPLE OF USE**

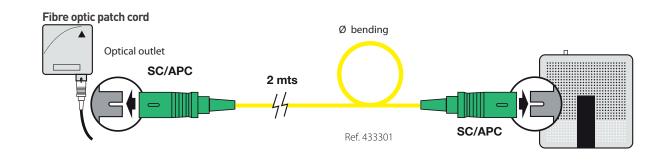
COLOR	LENGTH	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
В	1.5 m	T1	120x260x41	8	8424450144152
в	3 m	T2	166x268x64	10	8424450146019
B	5 m	T2	166x268x64	10	8424450146026

COLOR	LENGTH	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
3	1.2 m	T1	268x166x40	10	8424450043196
В	1.5 m	T1	120x260x29	10	8424450043776

COLOR	LENGTH	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Yellow	2 m	T1	120x260x29	10	8424450174050







# **DIGITAL**SET-TOP BOXES



High definition digital set-top boxes range to receive DTT, HbbTV or free to air satellite services. The ideal solution for TVs without the

The zAs series set-top boxes are made in Europe through an automated and robotic process. This manufacturing guarantees quality, reliability and low consumption.

# INTERESTING BACTS

Get the interactive services provided by the new television. The zAs Hbb gives your TV an Internet connection to access any VoD content (series, movies, documentaries and programs already issued) in addition to conventional programs of DTT (HDTV included).

Just connect zAs Hbb to Internet and you will receive the contents that your operator offers with the possibility to handle the playback control (rewinding, pause, play...).

**Televes** 









### CHARACTERISTICS

	REF.	DESCRIPTION	CHARACTERISTICS
TERRESTRIAL DIT	511501	<b>zAs Hbb</b> A hybrid set-top-box for digital terrestrial TV	DVB-T Standard HbbTV compatible MPEG2 (SD) & MPEG4 (HD) Video LCN compatible Teletext compatible Parental Code PVR function & TimeShift with USB Multimedia player: video, audio and pictures (via USB) Software update (USB or IP) Low consumption

	REF.	TYPE	CHARACTERISTICS		
SATELLITE Free-to-air services	717501	<b>zAs HD SAT</b> A set-top box for the digital TV by satellite	DVB-S / DVB-S2 Standards MPEG2 (SD) & MPEG4 (HD) Video DiSEqC 1.2 compatible, USALS motorization, LNB unicable Teletext compatible Parental code PVR function & TimeShift with USB Multimedia player: video, audio and pictures (via USB) Software update (USB) Low consumption		
	7118	<b>RSD</b> A set-top box for the digital TV by satellite	DVB-S Standard MPEG2 (SD) Video DiSEqC 1.2 compatible, USALS motorization, LNB unicable Teletext compatible Parental code Software update (RS-232) RF Modulator Games Low consumption		





 $\label{eq:hyborov} \mbox{HbbTV, VOD television for free and with contents} \\ \mbox{to the whole family.}$ 



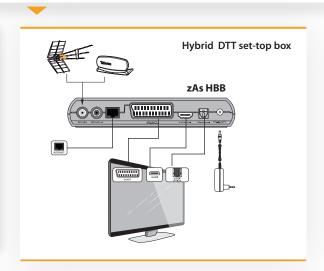




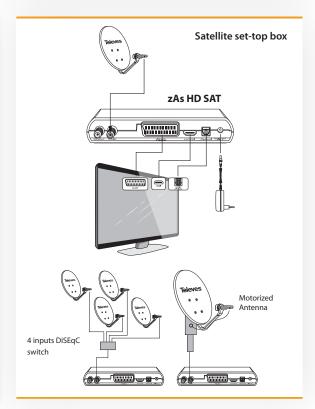


# **EXAMPLE OF USE**

CONNECTOR	INCLUDED ACCESSORIES	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
IEC 9,52 antenna SCART HDMI Optical Audio USB 2.0 RJ45 internet	HDMI Cable Coaxial cable lead Remote control (batteries incl.) AC Supply User Manual	Вох	200x218x60	1	8424450163757



CONNECTOR	INCLUDED ACCESSORIES	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
F antenna SCART HDMI Optical Audio USB 2.0	HDMI Cable Remote control (batteries incl.) AC Supply User manual	Вох	200x218x60	1	8424450148846
F antenna SCART 3RCA RS-232	Remote control (batteries incl.) AC Supply (integrated) User manual	Вох	372x200x55	1	8424450133996





The table from bellow shows what types of multimedia files can be reproduced with zAs set-top boxes:

File type	Extension	Video codec	Audio codec
MP4	MP4	MPEG4 H.264	AAC
WAV	WAV		PCM MP3
MATROSKA	MKV MKA	MPEG4 H.264	AC-3 MP2 MP3 AAC
AVI	AVI	XVID (MPEG4-ASP)	AC-3 MP2 MP3

# AUDIO/VIDEO & IR TRANSMISSION



This range is composed by devices which transport signals where it is necessary in the house, using different means of transmission:

**DigiDom A/V Kit:** audio, video and IR transmission without cables.

**DigiDom IR Kit:** infrared transmission (IR) without cables. Universal system to extend the remote control range.

**Coax IR Kit:** infrared transmission through coaxial cable.

# INTERESTING RACTS

Coaxial cable transmission always be stronger than one without cables, less sensitive to interferences (WiFi signals, fluorescent or neon lights, microwaves, etc) and is not affected by walls or another obstacles.









### CHARACTERISTICS

	REF.	DESCRIPTION	USE
AIR	7307	<b>DigiDom</b> Transmitter + Receiver	Transport an A/V signal (usually TV)
+ IR BY	7604	<b>DigiDom</b> Single receiver	from a source screen to a second screen which is placed in a remote room.  Infrared transmission (IR) allow you to control the source from the
W	7167	<b>DigiDom</b> Transmitter + Receiver	remote room.

	REF.	DESCRIPTION	USE
Y AIR	723702	<b>DigiDom</b> Transmitter + Receiver	Control a device which can be controlled by infrared (IR), from a place beyond remote controller
≅ B B	721902	<b>DigiDom</b> Single transmitter	range. Wireless transmission.

	REF.	DESCRIPTION	USE
OOXIAL	7605	Coax IR Transmitter + Receiver	Control a device which can be controlled by infrared (IR), from a place beyond remote controller
IR VIA	7606	<b>Coax IR</b> Single transmitter	range. IR are transmitted through coaxial cable from one side to other side.

# MORE INFO

# Coax IR System

Coax IR allows to control electronic devices using the coaxial network to transport TV signals. Enjoy satellite TV (or any type of TV content) in all your rooms with a single satellite STB.

You could use a Coax IR emitter on each TV and a Coax IR receiver in the satellite STB, and use a domestic modulator to share A/V signal from the receiver.

Coax IR elements have "IEC" connectors which allow it to connect to TV outlets or to another distribution network elements.

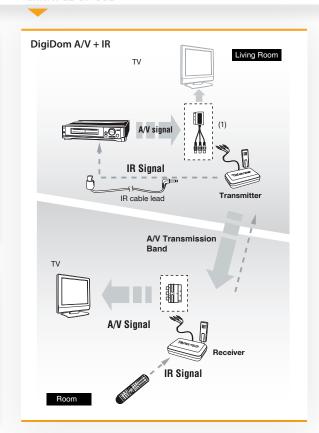


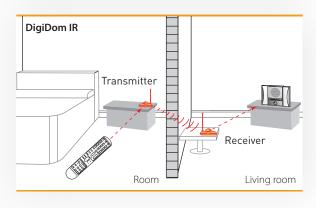
# **EXAMPLE OF USE**

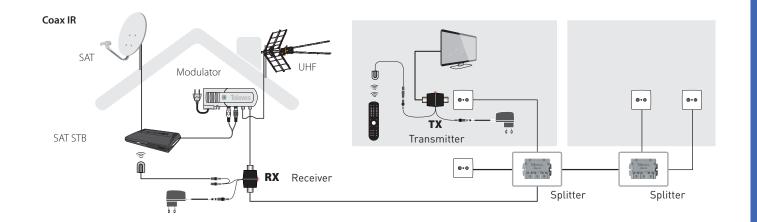
CHARACTERISTICS	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Transmission Band 2.4 GHz 3 configurable channels	Вох	250x192x97	1	8424450073070
Antennas are hidden inside the device PAL & NTSC Standards	Вох	250x192x53	1	8424450076040
Transmission Band 5.8 GHz 8 configurable channels Steerable antennas PAL & NTSC Standards	Вох	226x159x104	1	8424450145975

CHARACTERISTICS	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
30 60 KHz carrier 8 configurable channels ASK Standard	Вох	144x86x150	1	8424450177952
	Вох	144x85x104	1	8424450179000

ASK Standard	Вох	144x85x104	1	8424450179000
CHARACTERISTICS	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Transmission distance	Вох	125x125x65	1	8424450113370
up to 2 km	Box	125x125x39	1	8424450118269







# **MODULATORS** & CHARGERS



Domestic A/V modulator which generates, from an A/V source (camera, SAT STB,...) an analogue channel modulated in frequency (selectable) within the MATV terrestrial band (UHF). It is compatible with satellite installations and it includes a switch-mode power supply that optimise energy efficiency.

This USB charger has an efficiency greater than 75% which facilitates the devices to charge twice as fast as other adapters that only generate 0.75A. USB connection provides an universal compatibility.

# INTERESTING RACTS

Due to interior installation of amplifiers, automatic manufacture is subjected to a very restrictive safety standards. So, can be accessible by children and short circuits must be avoided.

# **Televes**

### CHARACTERISTICS

Channel indication with LCD display
Compatible with SAT (RF loop)
Gain control
Generates a test signal (to facilitate tuning)
Switch-mode power supply: 2.5 W consumption



# MORE INFO

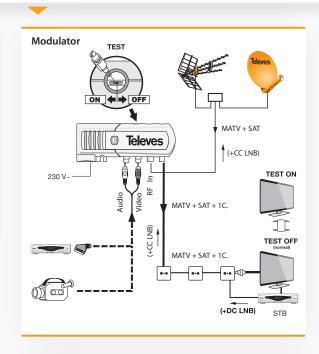
# VHF/UHF Modulator



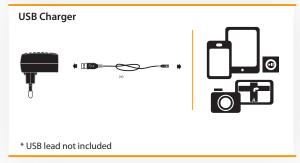


# **EXAMPLE OF USE**

TECHNICAL CHARACTERISTICS	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Modulation: PAL B/G Standard VHF/UHF Band 90 dBµV Output Level RF Loop: 5 2400 MHz Band 300 mA DC bypass < 2 dB Through Losses	Вох	150x90x40	1	8424450139806



COMPATIBILITY	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Universal: USB connector System: Apple & Android Products: Smartphones, MP3/4, eBook, GPS, tablets, cameras	T1 Blister	60x47x70	10	8424450166819



# Why choose a 100% made in Europe charger?

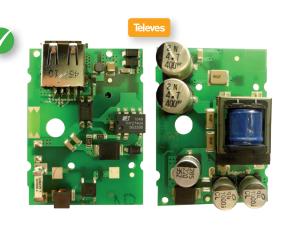
Do not leave security in the background, protect yourself and preserve you electronic devices.

Self-production and manufacturing allow to control every aspect related with the quality of the product and its components. In this way we obtain a high performance product with a greater efficiency.

Also, like Televes power supplies, charger is submitted to a strict thermal test to guarantee an optimal performance.

It offers the **best security:** 

- **Product that is charging and its battery:** thanks to its progressive and unalterable charge process against electrical fluctuations and its fuse that protects it against surges.
- **User:** thanks to its higher thermal insulation, low heat dissipation and chassis against fire made of ABS plastic.





Frequently, to install a tower we need to build a structure over a roof of a building or a house

A standard tower is not an option or private houses because its base needs a concrete structure

Pack tower is a structural support for several antennas designed to be installed in an easily, and without maintenance.

# INTERESTING BACTS

Pack tower is an excellent choice as an auxiliar structure for an exhibition, fair or lounge.

Use a "L" support (ref. 7349) to set a stably satellite dish.

You must install the support before the tower.

# **Televes**

### CHARACTERISTICS

	REF.	ADVANTAGES
PACK TOWER  Televes	306501	Long-lasting life. Made of galvanized steel and covered with electrostatic polyester powder which guarantees more than 15 years without corrosion. Stainless steel screws.  Versatility. The structure has plenty of space to erect several antennas. Two installation options: through the integrated mast or through "L" supports.  Easy installation. Installation can be done without any additional ground work as it was designeed to be screwed directly to the ground.  Compact. Easy transport and storage.  Optimized installation. Cable system is integrated inside the tower keeping quality and durability of the TV installation.  Plug and Play: Complete kit with all the accessories needed in assembly process.

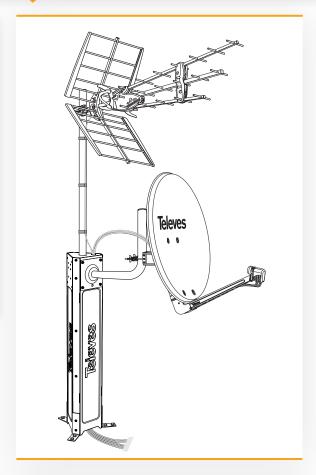
# MORE INFO

Mast thickness		2
Lateral panels thickness		1.5
Mast diameter	mm	45
Mast total height		1,170
Mast operative height		1,040
Weight	kg	17
Base bending moment	Nm	1,040
Mast bending moment	INIII	520



PACKING EXAMPLE OF USE

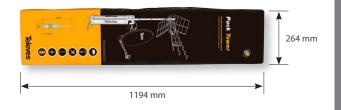
DIMENSIONS	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
103 cm 220 cm	Вох	240x2200x240	1	8424450174227





# Tower is completely disassembled and in a compact packaging.

It allows to transport it easily to the installation place, preventing handling problems and bulky problems (put in a car boot, go through doors, etc) and also optimize its storage.



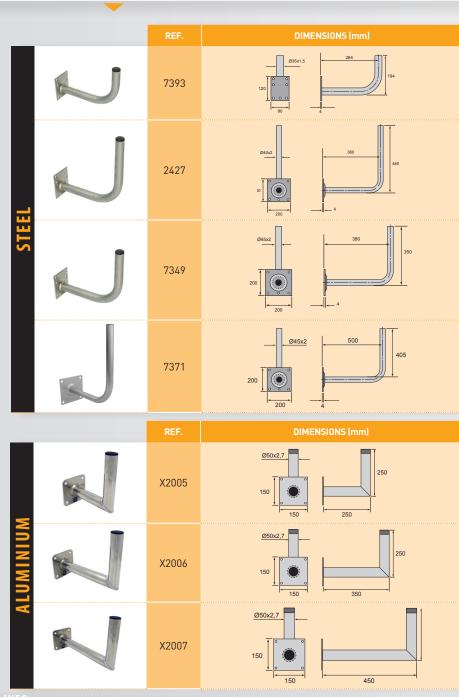
# ANTENNA WALL SUPPORTS



range is classified in: aluminium or with a double galvanization and reactive waterproofing RCP process (Reactive Coating Process). against rust and guarantees long durability even in adverse conditions.







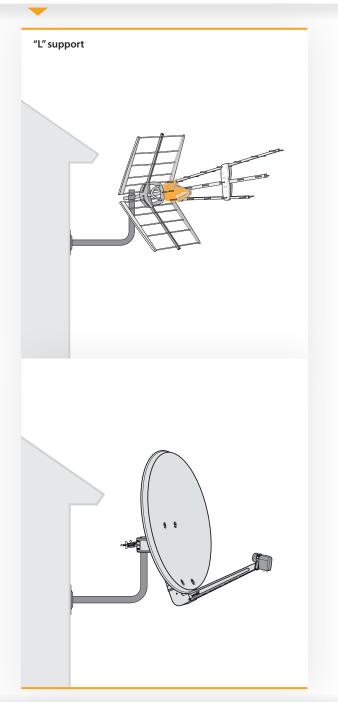
# Compatibility between wall brackets and dishes:

When a satellite dish is installed, fixing system choice is very important due to bracket type depends on dish dimensions.



PACKING EXAMPLE OF USE

MATERIAL	TYPE	TYPE	Qty	EAN13 CODE			
Processed steel	"L" - Wall	Box 400x300x210mm	10	8424450073933			
Processed steel	"L" - Wall	Bulk	5	8424450024270			
Processed steel	"L" - Wall	Box 590x390x325mm	5	8424450073490			
Processed steel	"L" - Wall	Bulk	5	8424450073711			
MATERIAL	TYPE	ТҮРЕ	Qty	EAN13 CODE			
Aluminium	"L" - Wall	Вох	10	4031136001162			
Aluminium	"L" - Wall	Вох	10	4031136001179			
Aluminium	"L" - Wall	Вох	10	4031136001247			



Ø Br	acket	35	40	4	15		50	
DISH	TYPE	7393	2427	7349	7371	X2005	X2006	X2007
ICD	630	✓	✓	✓	✓	✓	✓	✓
ISD	830	✓	✓	✓	✓	x	x	x
QSD	750	×	_/			✓	✓	✓
Q5D	850		<b>Y</b>	<b>Y</b>	<b>Y</b>	x	x	x

# ANTENNA GROUND SUPPORT

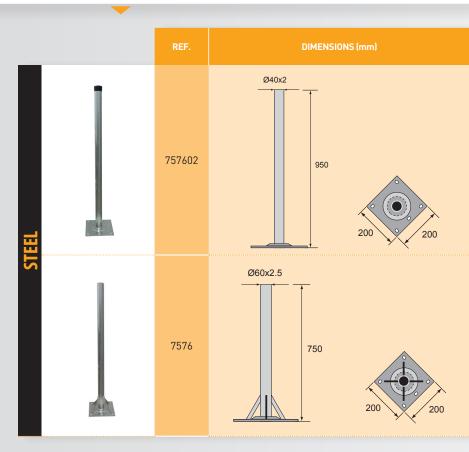


CHARACTERISTICS



These satellite dish "T" supports are screwed on the ground.

They are made with processed steel and covered with a double galvanization and reactive waterproofing RCP process (Reactive Coating Process). This technique increases resistance against rust and guarantees long durability



MORE INFO

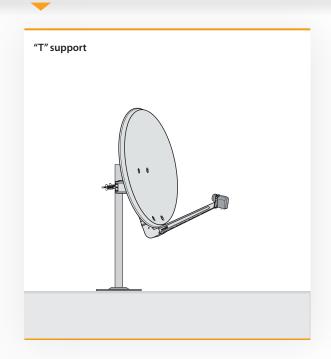
# Compatibility between wall brackets and dishes:

When a satellite dish is installed, the choice of the fixing system is very important due to the bracket type depends on dish dimensions.



PACKING **EXAMPLE OF USE** 

MATERIAL	TYPE	TYPE	Qty	EAN13 CODE
Processed steel	"T" - Ground	Bulk	1	8424450143087
Processed steel	"T" - Ground	Bulk	1	8424450075760



Ø B	racket	48	60
D	DISH	757602	7576
ISD	630	✓	×
120	830	✓	ж
QSD	750	./	
QЭD	850	•	•

# MASTS & BRACKETS

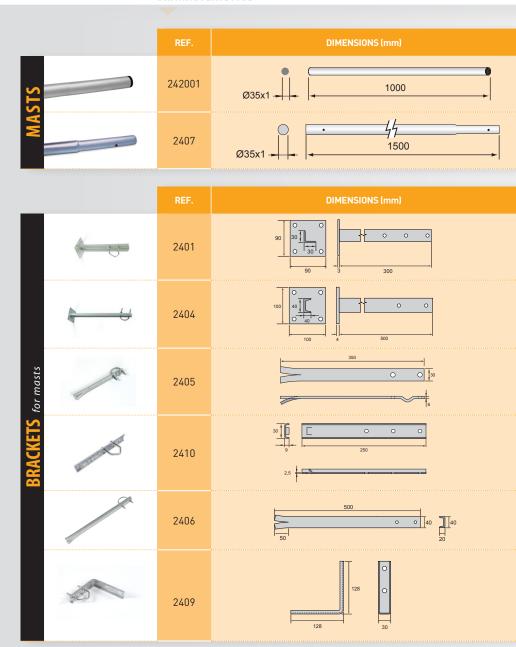
### CHARACTERISTICS

Masts could be necessary to terrestrial antenna installations. If the received signal is weak, a mast must be installed to place the antenna higher and TV signals will be received

Thanks to brackets the mast could be installed on facades detaching it to avoid different obstacles.

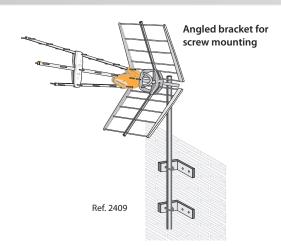
Televes fixations range allow two types of installation: **screw mounting or embedding mounting.** 

Galvanized surface is processed with RCP (Reactive Coating Process) to increase resistance against rust.



# <u>More info</u>

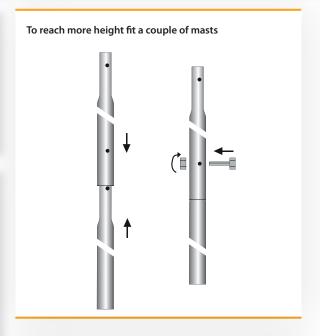
Mast needs two fixed points separate each other 50cm. Hence, accessories are usually bought in pairs.

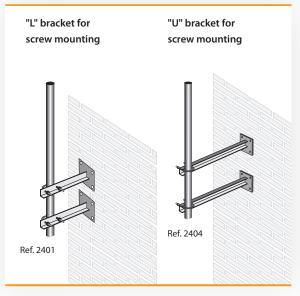


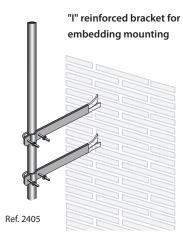
# **Televes**

DESCRIPTION	TYPE	Qty	EAN13 CODE
MAST (cap included)	Bulk	4	8424450168820
FITTED MAST (screws included)	Bulk	8	8424450024072

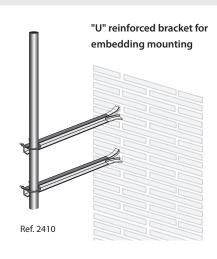
DESCRIPTION	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
"L" BRACKET for crew mounting	Box	320x225x165	10	8424450024010
"U" BRACKET for screw mounting	Box	546x246x117	6	8424450024041
"I" BRACKET for embedding mounting Reinforced	Вох	357x132x93	6	8424450024058
"U" BRACKET for embedding mounting Reinforced	Box	357x132x93	20	8424450024102
"U" BRACKET for embedding mounting Reinforced	Вох	555x156x86	7	8424450024065
ANGLED BRACKET for screw mounting	Вох	158x158x130	10	8424450024096











# **ACCESSORIES** & DISPLAY BOARD



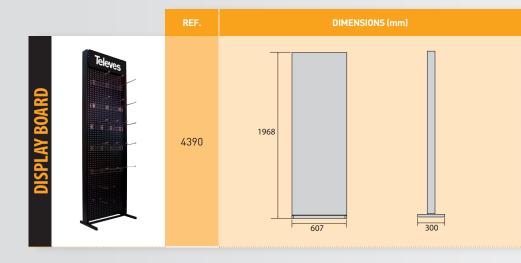
Complete or improve the mechanical part of the installation with different useful accessories like fixing complements.

In line with the rest of the mechanical accessories, all complements are made with a RCP process (Reactive Coating Process) to increase resistance against rust and guarantee a long durability even in adverse conditions.

Self-service professional display board allows the exhibition of the product packed in a blister or in a bag

# 2413 4951 4952 4361 1 mast plate 1 lug 3 guy wire 6 cable clamp 25 m steel wire (or 2 mm)

**CHARACTERISTICS** 

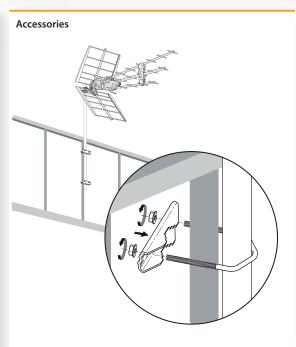




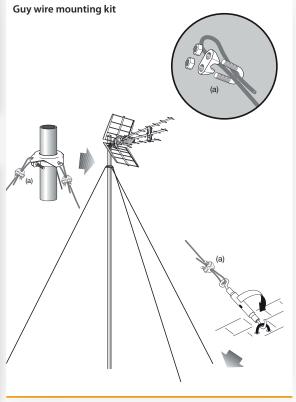


# **EXAMPLE OF USE**

<b>—</b>						
DESCRIPTION	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE		
MAST CLAMP Ø 35 mm	Вох	128x68x62	6	8424450024133		
MAST CLAMP Ø 2545 mm	Blister T1	120x260x41	8	8424450140154		
MAST U-BOLT Ø 2545 mm	Blister T1	120x260x41	8	8424450140178		
GUY WIRE MOUNTING KIT Ø 45 mm	Blister T2	268x166x55	10	8424450043615		





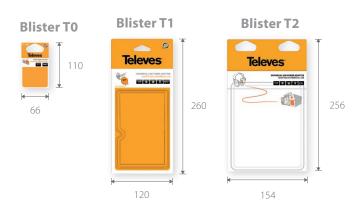


# **APPENDIX**

# **PACKING TYPE**

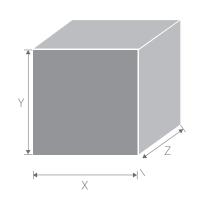
# BO B1 B2 B3 Televes 125 Televes 130

# **BLISTERS**

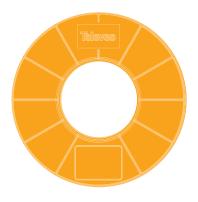


# **BOXES**

Dimensions are always specified in the order: X, Y, Z



# **PLASTIC REEL**



# **APPENDIX**

# **GLOSSARY OF ICONS**



Indoors



•••••

Dolby Digital Plus Compatible



••••••••

Easy F connection

••••••



Pantented Dipole & BOSS



High definition



Free of radiation



LTE Ready



Without cables



Free of interferences



Shielded connection box



Safe battery charge



Cable 100% certified



Asymmetrical directors



Fast charge



Ultra HD compatible



Outdoors



Reliable



HDMI



Aluminium



Fast mounting



SCART



ABS Plastic



Stainless Steel



Optical fibre



Satellite



Universal



Multimedia



H.264 MPEG4/AVC compatible

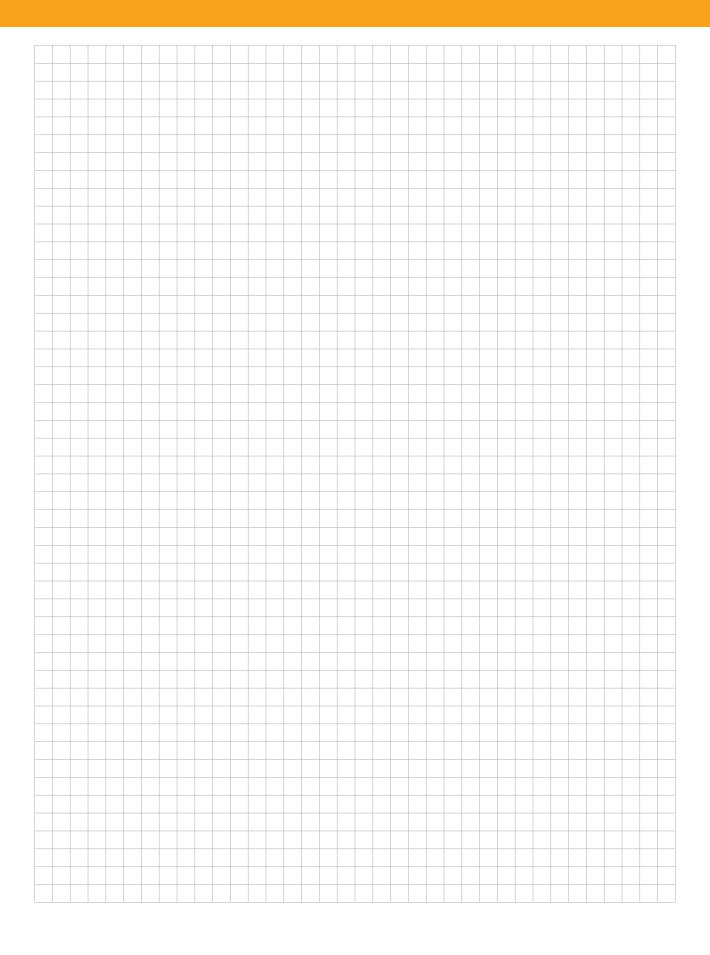


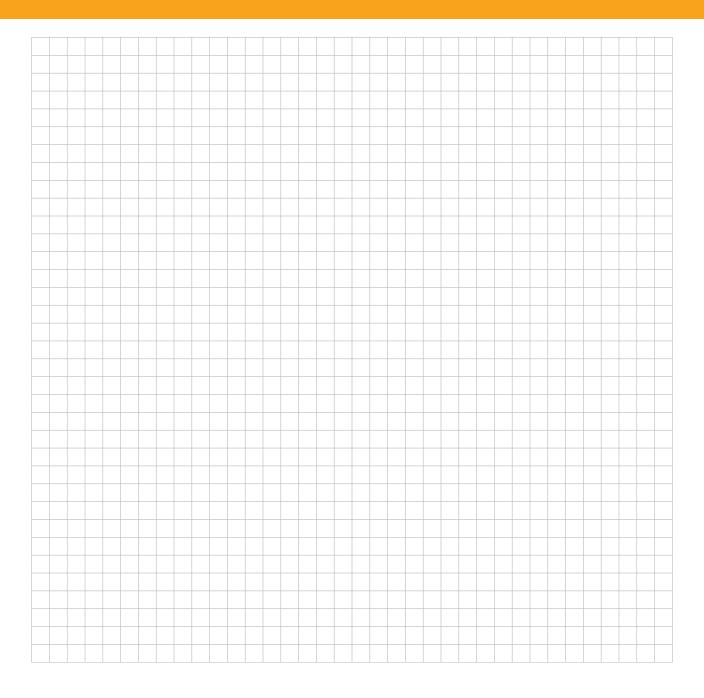
Energy efficiency



User Selectable Output Signal

# NOTES





Identifying colour in product
Orange
W White
Red
Grey
Black

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Televés goes beyond the silicon era into the new era in electronic component design, which allows building integrated circuits that work in the microwave frequency band.

TForce is based on the manufacturing of gallium arsenide (GaAs) semiconductor

Force is based on the manufacturing of gallium arsenide (GaAs) semiconductor compounds, which provides products with functionalities that are difficult to match.



# IF THE DAT BOSS CAN'T RECEIVE IT,

# **NOTHING CAN!**



HIGH DYNAMIC RANGE



WIDER DTT COVERAGE AREA



HIGH GAIN



VERY LOW NOISE FIGURE



MANUFACTURED IN EUROPE



EN.TELEVES.COM/DATBOSS











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# DO IT YOURSELF

