

## DAT BOSS LR antenna UHF, 1st Digital Dividend (LTE790)

If the DAT BOSS can't receive it, nothing can

Long-range Intelligent antenna with the BOSSTech system. Specially designed for quality reception of UHF (DTT) under extremely difficult reception conditions thanks to its structure; optimizes LTE band rejection up to channel 60 (790MHz).

|                     |               |
|---------------------|---------------|
| <b>Ref.</b>         | 149740        |
| <b>Logical ref.</b> | DATLRTFORCE1  |
| <b>EAN13</b>        | 8424450185377 |

### Other features

|               |        |
|---------------|--------|
| <b>Colour</b> | Orange |
|---------------|--------|

### Packing

|               |         |
|---------------|---------|
| <b>Box</b>    | 1 pcs.  |
| <b>Pallet</b> | 12 pcs. |

### Physical data

|                            |             |
|----------------------------|-------------|
| <b>Net weight</b>          | 3,205.00 g  |
| <b>Gross weight</b>        | 3,205.00 g  |
| <b>Width</b>               | 1,920.00 mm |
| <b>Height</b>              | 735.00 mm   |
| <b>Depth</b>               | 560.00 mm   |
| <b>Main product weight</b> | 3,205.00 g  |

### Highlights

- High dynamic range: it allows the reception of high-quality TV in a variety of critical situations, from areas where signals are very weak to installations with high signal levels

- Expanded DTT coverage area: up to 27% higher than previous models
- More stable signal reception: it supports signal variations or fading with no effect on the TV installation
- Optimal C/N: thanks to a noise figure of only 1.2dB that enhances the received signal quality
- Very high gain: TForce technology provides BOSS with an increase in gain of up to 13dB

## Main features

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- The DAT design, based on 3 Yagi antennas with asymmetric directors, provides great directivity as well as an optimal anti-echo radiation pattern
- Special double-U dipole: its open/close format provides optimal frequency response flatness
- A fully shielded switch box protects the BOSS system from impulsive noise; grounded for full protection against electrical discharge
- Manufactured in aluminium (stainless) for a long service life
- Fully automated manufacturing in Europe under the most stringent quality controls: a synonym of high reliability
- Two work mode options: Intelligent low power consumption mode or passive mode (lack of power supply).

## Discover

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### **TForce technology:**

Televes transitions from the traditional silicon era into a new era of electronic component design, allowing integrated circuits to be precisely manufactured for microwave frequency bands. Utilizing "State of the Art" MMIC technology TForce is manufactured using semiconductor compounds such as gallium arsenide (GaAs), providing the resulting products with unparalleled features and performance

Televes has reinvented the antenna concept. Until now, an antenna was just the reception component of a TV installation in which gain and directivity were the main features. The introduction of a smart device like BOSS provides the antenna with the capacity to receive very weak signals without the risk of being affected by very strong signals, the result is a dynamic balance between weak and strong signals

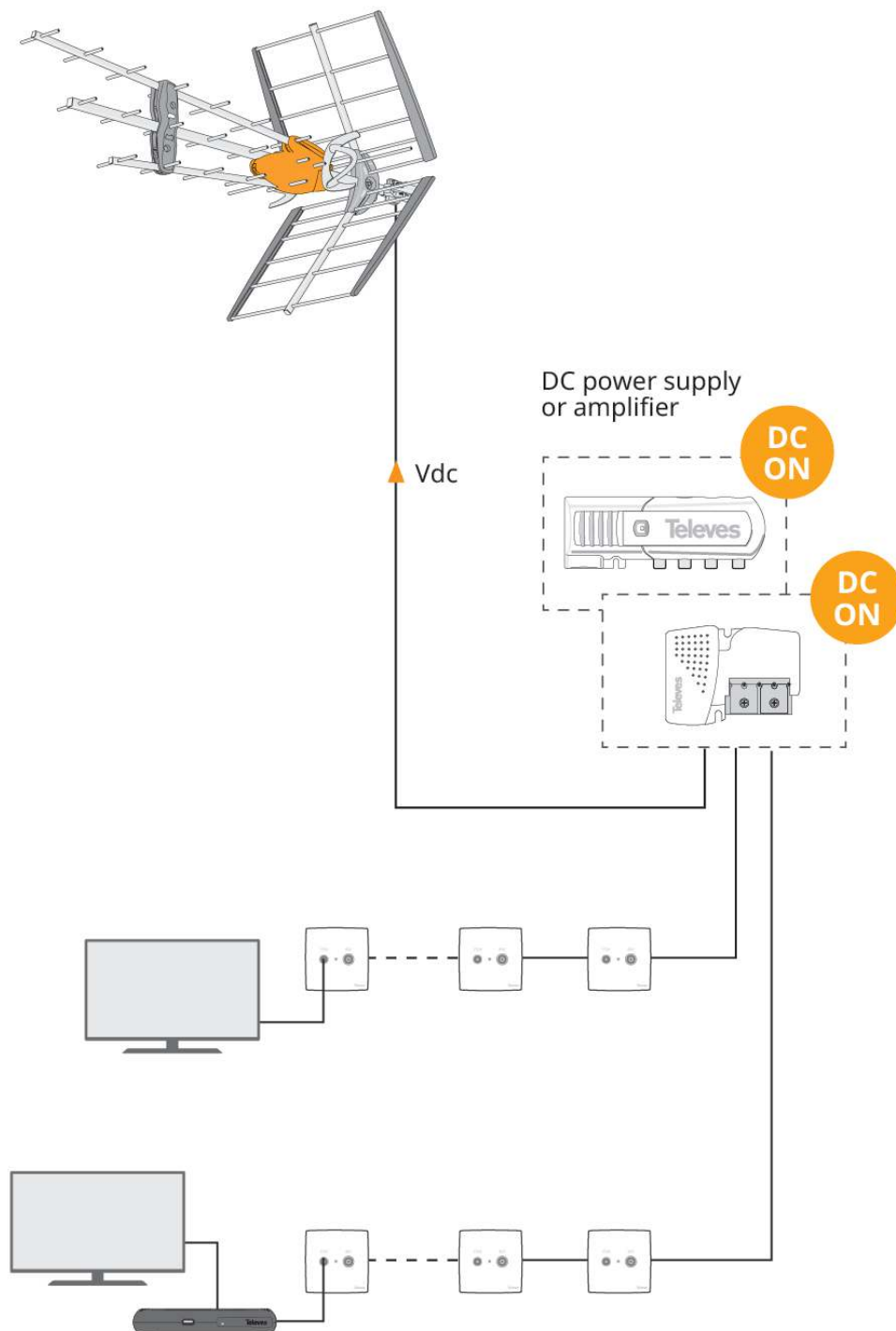
that provides optimum signal levels at all times: the "dynamic range" concept turns out to be the most outstanding among quality parameters.

The creation of TForce with BOSS technology using MMIC components is an extraordinary milestone in the optimization of the dynamic range. The technology that allowed the reception of lost signals from distant satellites is now allowing the enhancement of the coverage range in DTT installations.

## Application example

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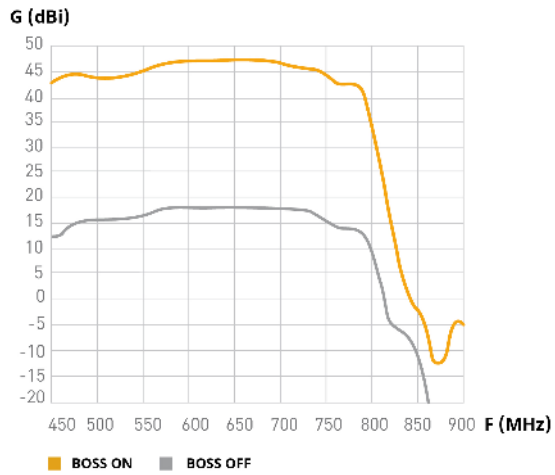
BOSS activation by means of a power supply unit or an amplifier.



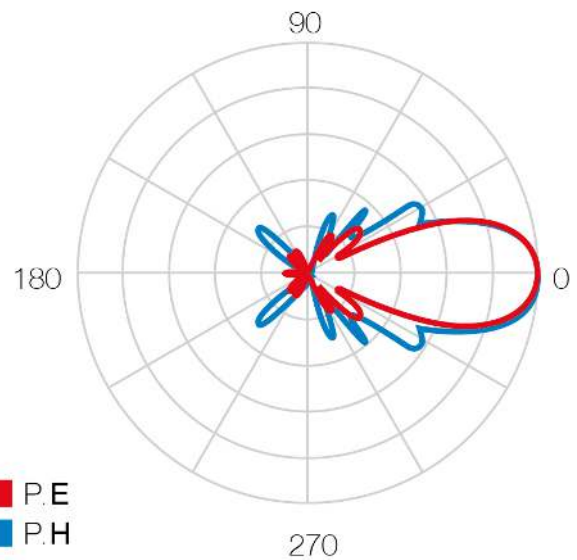
BOSS activation through headend system.



## Graphic documentation



Radiation pattern



Radiation pattern

## Mounting details

Double fixing point (top and bottom) to ensure stability.



Two fixing points (bottom and top) in order to guarantee stability

## Technical specifications : Ref. 149740

|                             |     |                    |             |      |
|-----------------------------|-----|--------------------|-------------|------|
| <b>Bands</b>                |     |                    | UHF         |      |
| <b>Frequency range</b>      | MHz |                    | 470 ... 790 |      |
| <b>Channels</b>             |     |                    | 21 ... 60   |      |
| <b>BOSS mode</b>            |     | ON                 |             | OFF  |
| <b>Gain</b>                 | dBi | 47                 |             | 19   |
| <b>Output level</b>         |     | Auto* <sup>1</sup> |             | --   |
| <b>Noise figure</b>         |     | 1.2                |             | --   |
| <b>Signal level of use</b>  |     | < 75               |             | > 75 |
| <b>Powering</b>             | Vdc | 12 ... 24          |             | 0    |
| <b>Max. current</b>         |     | 40                 |             | --   |
| <b>Beamwidth</b>            | °   |                    | 27          |      |
| <b>F/B ratio</b>            | dB  |                    | > 25        |      |
| <b>Wind load (@130Km/h)</b> | N   |                    | 141         |      |
| <b>Wind load (@150Km/h)</b> | N   |                    | 194         |      |

\*<sup>1</sup> The gain is automatically adjusted according to the level of output