



## Overlight optical transmitter CWDM Outoor use, DAB/UHF/SAT, 1550nm, Po 9dBm

# Enhanced electronics and optical engineering to light up your TV

CWDM WideBand satellite and terrestrial optical transmitter specifically designed for outdoor installation, at a minimum distance from the LNB. This device receives a satellite signal from an RF Wideband LNB and terrestrial band, and distributes it up to 64 users over a fiber output in the 1550nm window with 9dBm optical power.

Thanks to its optimized electronics and low losses, it allows to reduce the number of amplifiers required and simplifies deployment in the design of collective installations, preserving the signal quality throughout the process. Furthermore, it is fully indicated for use in GPON installations and adapts to different solutions.

This device is part of the Overlight system, that distributes satellite and terrestrial signals to multiple users through a single optical fiber.

It allows amplification.

This product is certified with the European IRS Certification Scheme mark, representing that it has passed the relevant test as set out in the latest EICS test specification, available from the DTG or CAI.



| Ref.         | 237514        |
|--------------|---------------|
| Logical ref. | OLT1550KA     |
| EAN13        | 8424450271889 |

#### Packaging info

| Box | 1 pcs. | Net weight             | 400.00 g  |
|-----|--------|------------------------|-----------|
|     |        | Gross weight           | 710.00 g  |
|     |        | Width                  | 136.00 mm |
|     |        | Height                 | 127.00 mm |
|     |        | Depth                  | 46.00 mm  |
|     |        | Main product<br>weight | 400.00 g  |
|     |        |                        |           |

Physical data

#### Highlights

- High output level that makes it ideal for collective installations of up to 64 users
- Compatible with GPON deployments
- Low losses
- Optimized electronic behavior
- Very compact in dimensions and weight (137x126x45mm)
- Powering from an external power supply, via power input (F connector)
- 100% European design, quality, and manufacturing

#### Main features

- FC/APC optical connector
- F-type RF connectors



- High-screening Zamak chassis
- Wall and mast mounting
- Power supply and adapter cable included
- LED signal status indicator

#### Discover

#### WideBand technology

WideBand (also known as FullBand) refers to broadband transmission technology that uses a wide range of frequencies. In WideBand TV systems, a substantial portion or the whole of the frequency spectrum is available to users. It can be used in fiber deployments where long cable runs are demanded, or coaxial scenarios in combination with multiswitches adapted to this technology.

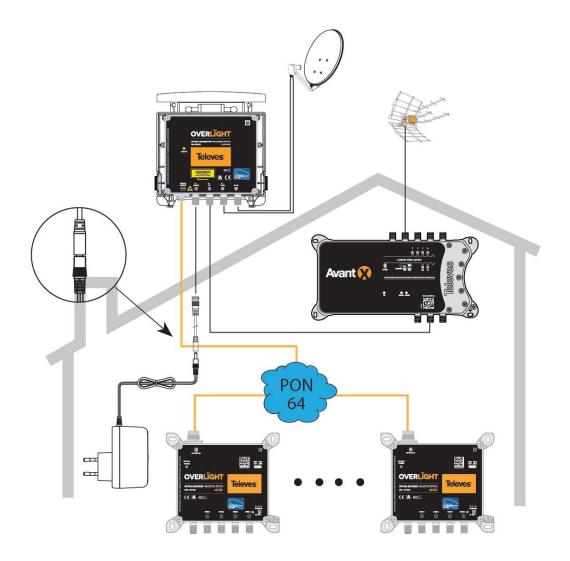
In WideBand technology, an LNB captures a complete satellite signal and distributes it through 2 universal outputs (vertical -V- and horizontal -H-), each of them with the combination of high (H) and low (L) bands, in a frequency range between 290 and 2340 MHz.

## Despite the fact that Quattro technology is the most widely deployed technology in TV systems nowadays, WideBand technology brings significant advantages to the installation:

- **Simpler, faster and cleaner installation:** In WideBand technology the number of coaxial cables connecting the LNB to the multiswitches is half as in traditional Quattro deployments, so the installation is done quicker and easier. The installation will also be tidier with fewer cables.
- Wider bandwidth than other technologies: WideBand channels can carry more information thanks to their wide bandwidth (290-2340MHz). This powerful feature allows a greater number of services to be delivered to the end users of the installation.
- **Reusable deployment:** WideBand technology allows signal distribution by reusing a Quattro installation. It can be distributed through the old 4 cables coming down from the roof to capture signals from up to 2 satellites, changing only LNBs and MSWs to be WideBand compatible.



### Application example





### Technical specifications : Ref. 237514

| Inputs/Bands                   |      | TERR             | V         | Н        |  |
|--------------------------------|------|------------------|-----------|----------|--|
| Frequency range                | MHz  | 47 694           | 290 2340  | 290 2340 |  |
| Input level                    | dBµV | 83 95            | 70 85     | 70 85    |  |
| Number of MUX for Input level  |      | 24               | 52        | 52       |  |
| MUX bandwidth for Input level  | MHz  | 8                | 40        | 40       |  |
| Powering per inputs            | Vdc  | 11.7 17.7        | 11.7 17.7 |          |  |
| Max. current pass              | mA   | 500              | 500       |          |  |
| Max. current pass total inputs | mA   | 720              |           |          |  |
| Impedance                      | Ω    | 75               |           |          |  |
| Laser                          |      | MQW-DFB uncooled |           |          |  |
| Wavelength                     | nm   | 1550             |           |          |  |
| Optical output power           | dBm  | 9                |           |          |  |
| RF connectors                  |      | "F" female       |           |          |  |
| Optical connectors             |      | FC/APC           |           |          |  |
| Powering                       | Vdc  | 12 18            |           |          |  |
| Max. power consumption         | W    | 5.6              |           |          |  |
| Current consumption            | mA   | < 430            |           |          |  |
| Operating temperature          | °C   | -20 45           |           |          |  |
| PSU input voltage              | Vac  | 100 240          |           |          |  |
| Max PSU current input          | mA   | 600              |           |          |  |
| PSU output voltage             | Vdc  | 12               |           |          |  |
| Max PSU output current         | А    | 1.5              |           |          |  |