Overlight WideBand Optical Receiver with 1 SAT+TERR input and 1 WB output + 1 TERR output, OLC integrated

Enhanced electronics and optical engineering to light up your TV

Optical Wideband satellite and terrestrial receiver with OLC technology. Designed to capture the TV optical signal from 1 satellite on a single fiber (1200...1600 nm) and restore the original terrestrial and satellite TV signals, providing 1 Wideband output and 1 terrestrial output.

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.

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

Ref.	237545
Logical ref.	OLRWB1S
EAN13	8424450298527

Packing

Box	1 pcs.

Physical data

Net weight	381.00 g
Gross weight	502.00 g
Width	138.00 mm
Height	125.00 mm
Depth	45.00 mm
Main product weight	381.00 g

Highlights

- Very compact in dimensions and weight (137x120x30 mm)
- Low losses
- Built-in OLC (Optical Level Control) system: automatically adjusts the parameters to achieve a constant output level, irrespective of the channel load
- Optimized electronic behavior
- 100% european design, quality, and manufacturing
- SC/APC optical connector
- F-type RF connectors
- High-screening Zamak chassis
- Can be wall-mounted using screws
- LED indicator displaying signal status
- Remote power feeding using V-H or an external PSU
- Low power consumption

Discover

WideBand technology

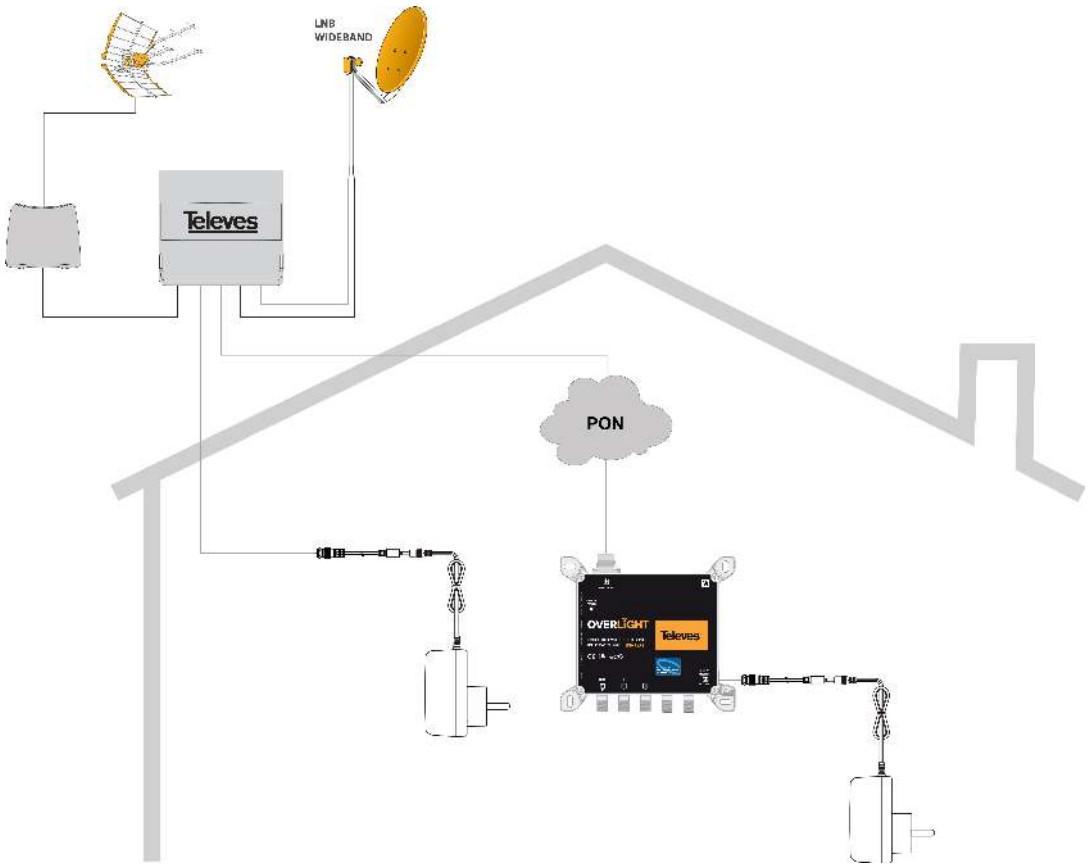
WideBand (also known as FullBand) refers to broadband transmission technology that uses a wide range of frequencies. In WideBand TV systems, a substantial portion or the whole of the frequency spectrum is available to users. It can be used in fiber deployments where long cable runs are demanded, or coaxial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

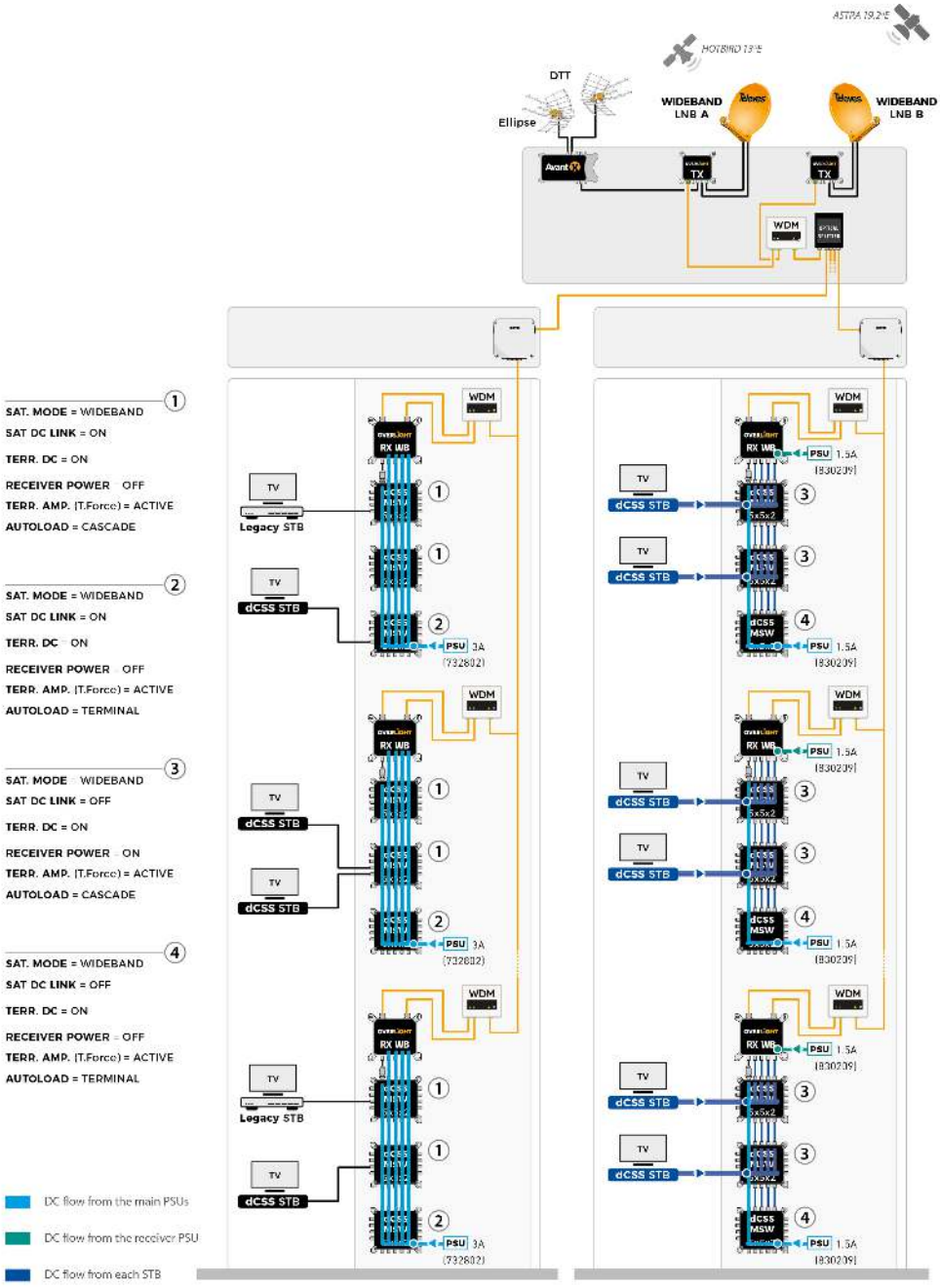
In WideBand technology, an LNB captures a complete satellite signal and distributes it through 2 universal outputs (vertical -V- and horizontal -H-), each of them with the combination of high (H) and low (L) bands, in a frequency range between 290 and 2340 MHz.

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


LNB
WIDEBAND
Televes
PON
OVERLIGHT
Televes


ASTRA 19.2°E
HOTBIRD 13°E
DTT
Ellipse
WIDEBAND LNB A
WIDEBAND LNB B
TX
WDM
RX WB
PSU 3A
(732802)
PSU 1.5A
(830209)
TV
Legacy STB
dCSS STB
dCSS MSW
1
SAT. MODE = WIDEBAND
SAT DC LINK = ON
TERR. DC = ON
RECEIVER POWER = OFF
TERR. AMP. (T.Force) = ACTIVE
AUTOLOAD = CASCADE
2
SAT. MODE = WIDEBAND
SAT DC LINK = ON
TERR. DC = ON
RECEIVER POWER = OFF
TERR. AMP. (T.Force) = ACTIVE
AUTOLOAD = TERMINAL
3
SAT. MODE = WIDEBAND
SAT DC LINK = OFF
TERR. DC = ON
RECEIVER POWER = ON
TERR. AMP. (T.Force) = ACTIVE
AUTOLOAD = CASCADE
4
SAT. MODE = WIDEBAND
SAT DC LINK = OFF
TERR. DC = ON
RECEIVER POWER = OFF
TERR. AMP. (T.Force) = ACTIVE
AUTOLOAD = TERMINAL
DC flow from the main PSUs
DC flow from the receiver PSU
DC flow from each STB

Technical specifications : Ref. 237545

Number of outputs TERR		1		
Number of outputs V		1		
Number of outputs H		1		
Inputs/Bands		TERR	V	H
Output level	dBµV	78 ... 86	66 ... 74	66 ... 74
Output frequency range	MHz	47 ... 694	290 ... 2340	290 ... 2340
Impedance	Ω	75		
Wavelength	nm	1200 ... 1600		
Optical return losses Min	dB	40		
Optical device		InGaAs pin photodiode		
Optical input level	dBm	-11 ... -1		
RF connectors		"F" female		
Optical connectors		SC/APC		
Powering	Vdc	12 ... 18		
Max current consumption (@12V)	mA	370		
Max current (@18V)	mA	246		
Operating temperature	°C	-5 ... 45		
PSU input voltage	Vac	100 ... 240		
Max PSU current input	mA	600		
PSU output voltage	Vdc	12		
Max PSU output current	A	1.5		
PSU protection index		23		
PSU operating temperature	°C	-5 ... 45		

These measurements are conditioned to the use of an Overlight transmitter