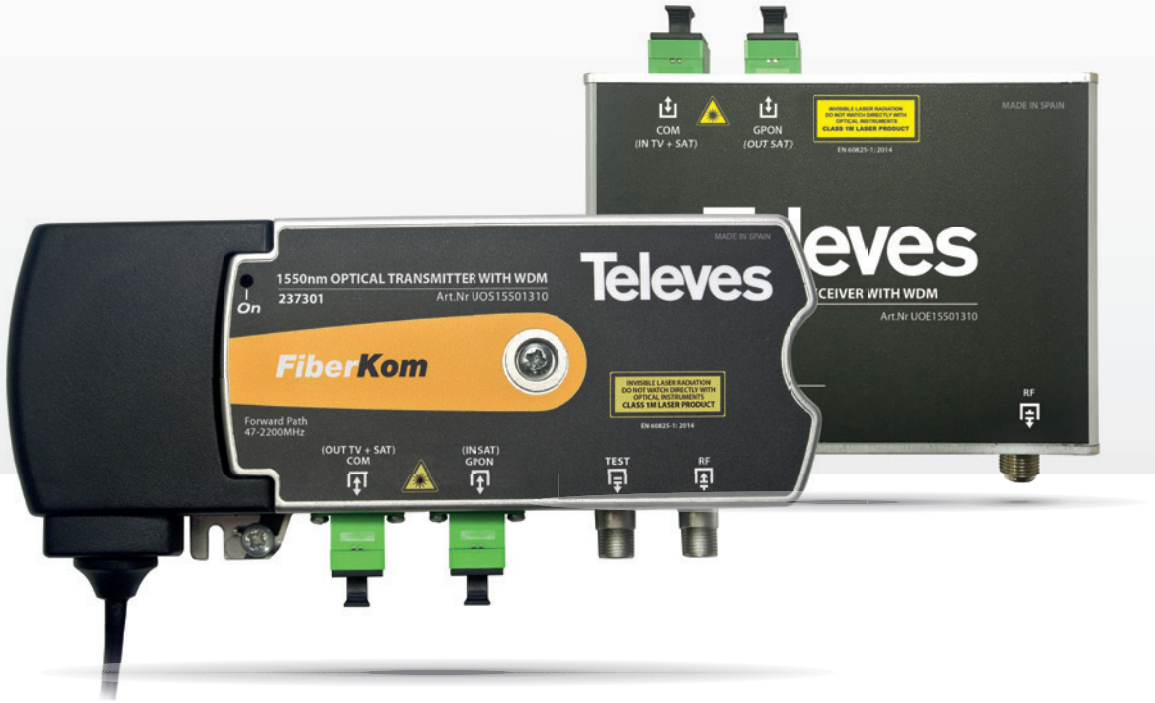
# THE COMPLETE SATELLITE AND DTT LINEUP IN A SINGLE OPTICAL FIBRE




## OPTICAL SYSTEM WITH WDM (FULL SAT + DTT)

REF.237301 AND 237311

- Without adjustments
- Transmitter with OMI test socket
- Receiver with power supply outputs
- Energy-efficient thanks to its low power consumption

OLC

OPTICAL LEVEL CONTROL

OPTICAL FIBRE

# OPTICAL SYSTEM WITH WDM (FULL SAT + DTT)

## DESCRIPTION

**The system allows the distribution of the whole contents of a satellite and the whole terrestrial band on a single fibre.**

The **transmitter (Ref.237301)** receives the signal from an optical LNB (1,310 nm) and mixes it with the terrestrial signal in the 1,550nm window, generating one single optical fibre output. The quality of the conversion makes this the ideal device for scenarios in which the terrestrial band contains multiple muxes.

The **receiver (Ref.237311)** separates the 1310nm optical signal, which is delivered to an optical converter that restores the four satellite's band and polarity combinations. It also includes a receiver in the 1550nm window to deliver the RF signal (DTT).

Neither device requires any adjustments and their installation is extremely simple.


## MAIN FEATURES

- Ideal for optical LNB installations with a high load of DTT muxes
- No adjustments required and wide dynamic ranges
- Test socket and level display
- Full bandwidth optical reception

## HIGHLIGHTS

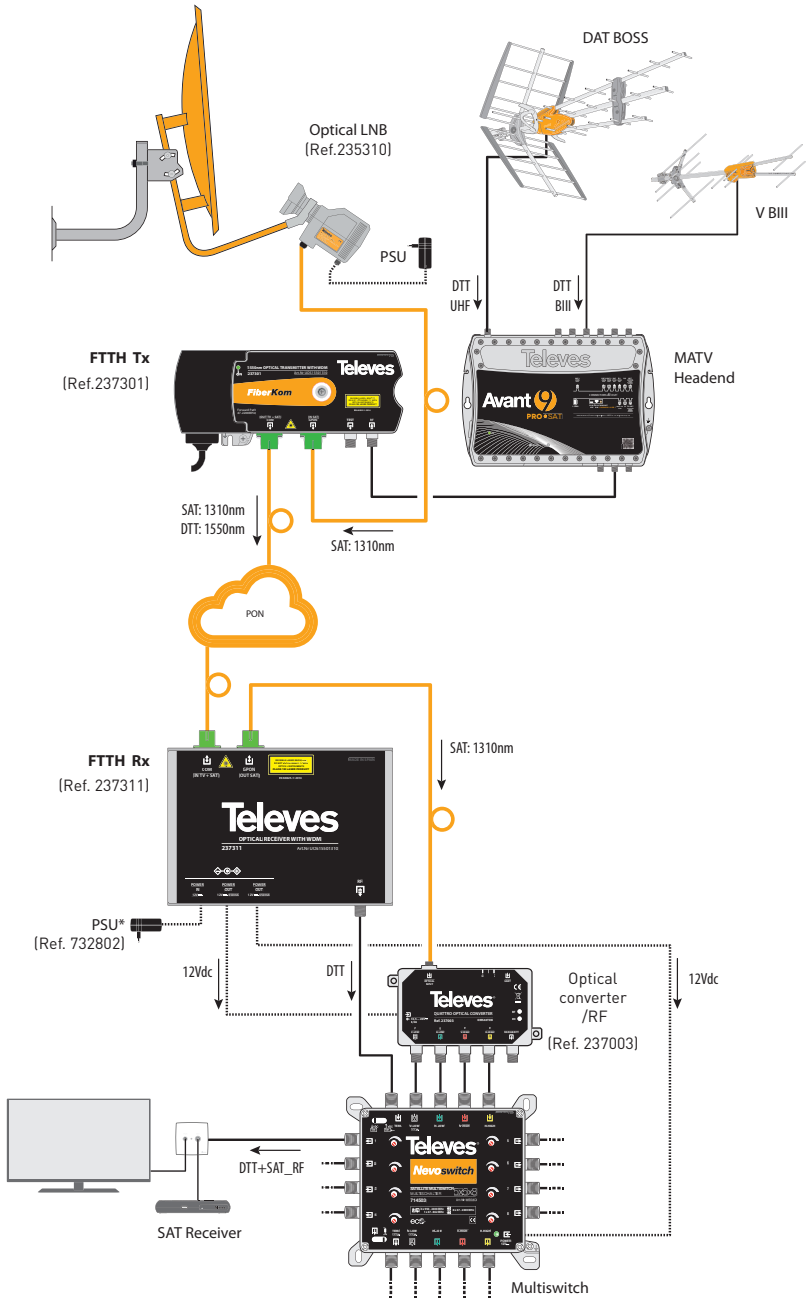
- Equipped with OLC *(Optical Level Control)*, which automatically the parameters tu provide a constant output level, whatever the channel load
- High output voltage, low power consumption
- High sensitivity in1550nm
- Compatible with optical LNB systems

| REF. | DESCRIPTION | EAN 13 |
|---|---|---|
| 237301 | **TX FO 1550nm (TERR.) / WDM 1310nm (SAT) SC/APC** | 8424450187098 |
| 237311 | **RX FO 1550nm (TERR.) / WDM 1310nm (SAT) SC/APC** | 8424450187104 |

Televes

APPLICATION EXAMPLE

## RED PON WITH OPTICAL LNB AND RF OVERLAY




In the FTTH Tx (Ref.237301) the 1310nm signal from an optical LNB is mixed with the DTT signal converted to 1550nm. Both signals enter the FTTH Rx (Ref.237311) where the 1550nm DTT signal is converted to RF while the 1310nm window is delivered to an optical converter (Ref.237003) that restores the TVSAT signal into RF.

As a result, both DTT and the complete lineup of a given satellite are available at the user outlet.

* *Power supply not included. Recommended refs.:*
*732101: 12V-0.8A (EU plug)*
*732802: 12.5V-2.8A (EU plug)*
*732210: 12V-1.5A (UK plug)*

# OPTICAL SYSTEM WITH WDM (FULL SAT + DTT)

TECHNICAL SPECIFICATIONS

## TRANSMITTER REF.237301

| RF PARAMETERS | | |
|---|---|---|
| Bandwidth | MHz | 47 ... 2200 |
| Flatness | dB | ± 0,75 (47-1200MHz)<br>± 2,5 (47-1200MHz) |
| Input level | dBµV | 79 (47-1200MHz) 42ch CENELEC<br>95 (950-2200MHz) DIB-VDE 0855/12 |
| CNR/CSO/CTB | dB | >51/>60/>65 |
| **OPTICAL OUTPUT** | | |
| Laser | type | MQW-DBF |
| Output power | dBm | +6 |
| Wavelength | nm | 1550 |
| **GENERAL** | | |
| Supply voltage | V~ | 99...253 |
| Maximum power | W | 4 |
| Max. current consumption | mA | 75 (99V) / 40 (253V) |
| Dimensions (xyz) | mm | 185 x 80 x 35 |
| Weight | g | 400 |
| IP protection index | IP | 30 |

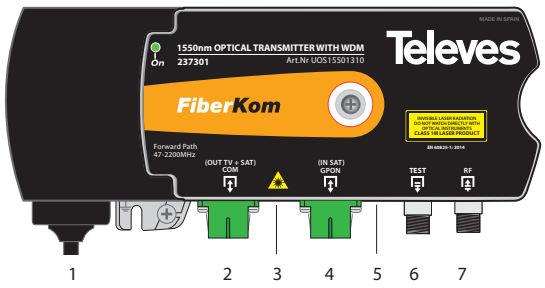
## RECEIVER REF.237311

| RF OUTPUT | | |
|---|---|---|
| Bandwidth | MHz | 47 ... 1006 |
| Flatness | dB | ± 1.5 |
| Self-regulating output level | dBµV | 78 |
| CNR/CSO/CTB | dB | >49/>60/>60 |
| Slope | dB | 5 |
| **OPTICAL INPUT / OUTPUT** | | |
| Optical input level for OLC | dBm | -8 ... +1 |
| Wavelength | nm | COM: 1310 & 1490 & 1550 (1)<br>GPON: 1310 & 1490 (2) |
| **GENERAL** | | |
| Supply voltage | V= | 12 |
| Device internal consumption | mA | 250 |
| DC transit through the output | mA | 450 |
| Dimensions (xyz) | mm | 114 x 79 x 30 |
| Weight | g | 250 |
| IP protection index | IP | 30 |

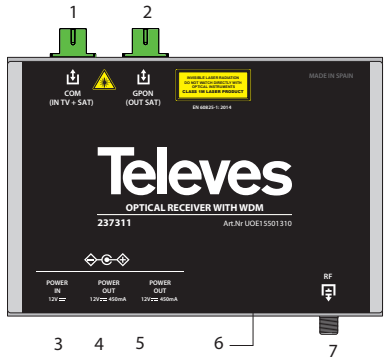
*(1) 1310 and 1490nm bidirectional, 1550nm input only.*

*(2) 1310 and 1490nm bidirectional.*

DESCRIPTION

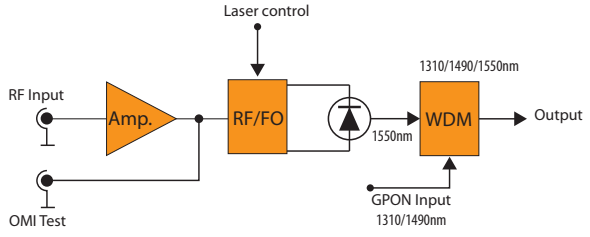


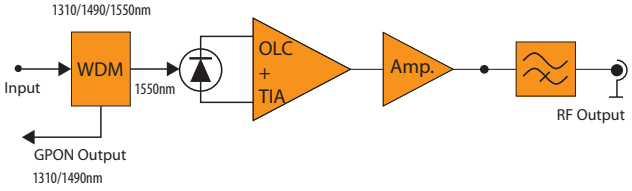

1 Power supply
2 COM 1310 + 1490 + 1550nm
3 Power LED
4 GPON 1310 + 1490nm
5 Optical level LED
6 OMI Test socket
7 RF Input




1 COM 1310 + 1490 + 1550nm
2 GPON 1310 + 1490nm
3 12Vdc Input
4 12Vdc Output max. 450mA
5 12Vdc Output max. 450mA
6 OLC LED
7 RF Output

BLOCK DIAGRAM

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