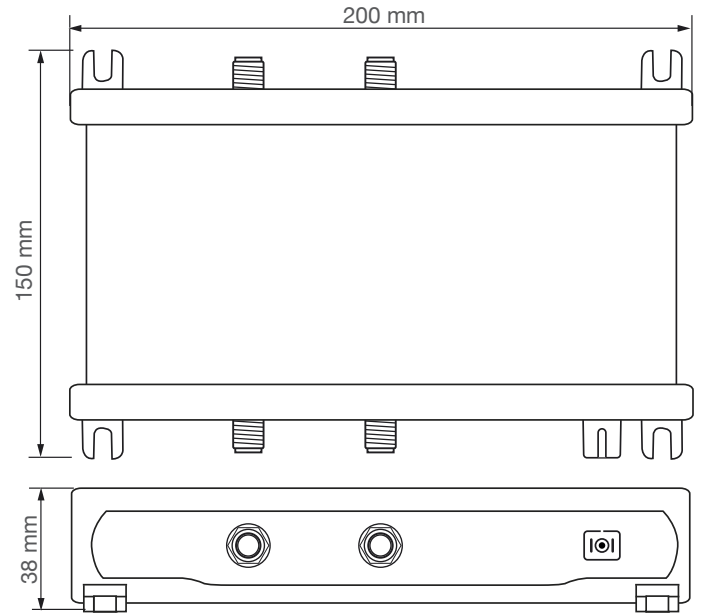


# TXWB

## Optical Transmitter User manual







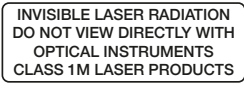


- Satellite gain and slope adjustable amplifier
- LNB power feeding
- Test and Monitor for each input
- Optical monitor Led for each Laser
- ON/OFF switch for each Laser
- Double DC input for redundant power supply



Rel. 1.1

Ready for **UHD TV** **MADE IN ITALY**

OPTICAL TRANSMITTER		TXWB
RF SATELLITE INPUT	n°	2
RF TEST OUTPUTS	n°	3
OPTICAL OUTPUT	n°	1
<b>OPTICAL</b>		
OPERATION WAVELENGTH	nm	1310 - 1330
LASER TYPE		UN-COOLED MULTI QUANTUM DFB
LASER CLASS		1M, EN 60825-1
OUTPUT POWER	dBm	8
OUTPUT CONNECTOR		SC/APC
<b>SATELLITE</b>		
INPUT BANDWIDTH	MHz	250... 2.400
INPUT RANGE LEVEL (ADJUSTABLE)	dBμV	70... 90
A.C.G. RANGE	dB	20
SLOPE ADJUSTER RANGE	dB	0... 9
RETURN LOSS	dB	>12
MAX. LNB REMOTE FEEDING		5,25W (15VDC/350mA)
<b>OTHERS</b>		
DC INPUT VOLTAGE	V	12... 20
MAX. POWER CONSUMPTION W/O EXTERNAL LOAD		3,5W (240mA@15VDC)
MAX. POWER CONSUMPTION WITH EXTERNAL LOAD		17,2W (1150mA@15VDC)
SHORT-CIRCUIT PROTECTION		ALL INPUTS
DIMENSIONS	mm	146x200x38
OPERATING TEMPERATURE	°C	0... +50

<b>DESCRIPTION OF SYMBOLS AND ELECTRICAL SAFETY</b>	
	The equipment complies with the CE requirements
	The equipment is designed for indoor use only
	Equipment grounding terminal
	This symbol indicates that the equipment complies with the class II equipment safety requirements
	To avoid the risk of electric shock, do not open the equipment.
	Invisible Laser Radiation avoid direct exposure to beam
	Class 1M laser product. Do not watch directly with optical instruments
	The equipment is compliant with RoHS 2011/65EU
	Dispose according to local authorities recycling processes

## Safety instructions

1. Read carefully these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not expose this apparatus to extreme temperatures
6. Do not install this apparatus near water or expose to rain and moisture
7. Place the apparatus in a dry and well-aired location
8. Install the unit on a vertical wall, or in a waterproof cabinet with a minimum IP55 rating, and fix it safely using the provided fixing plugs
9. Do not install the unit lying flat or on its top
10. Connect the power adapter cord to a detachable power supply socket
11. Unplug the apparatus during lighting storms or when unused for long time
12. Only use accessories specified by the manufacturer
13. Do not remove the cover without disconnecting from the mains first
14. Ambient temperature should not be lower than 0°C and higher than 50°C
15. Please allow air circulation around the apparatus



# Installation warnings



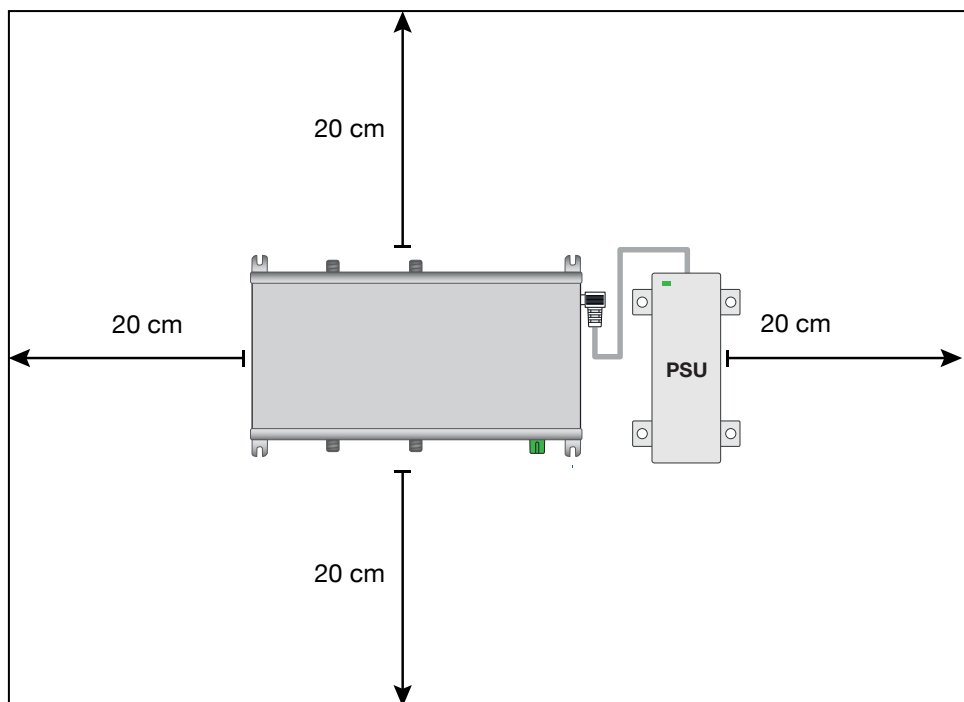
INVISIBLE LASER RADIATION  
DO NOT VIEW DIRECTLY WITH  
OPTICAL INSTRUMENTS  
CLASS 1M LASER PRODUCTS

**Place the apparatus and the power supplier in a dry and well-aired location**

**Install the unit on a vertical wall, or in a waterproof cabinet with a minimum IP55 rating, and fix it safely using the provided fixing plugs**

**Use only the power supplier provided with the amplifier.**

**The use of not-original power suppliers determines the not-compliance of the product and can cause malfunctions and void the warranty**



# TXWB DESCRIPTION

## Box Content

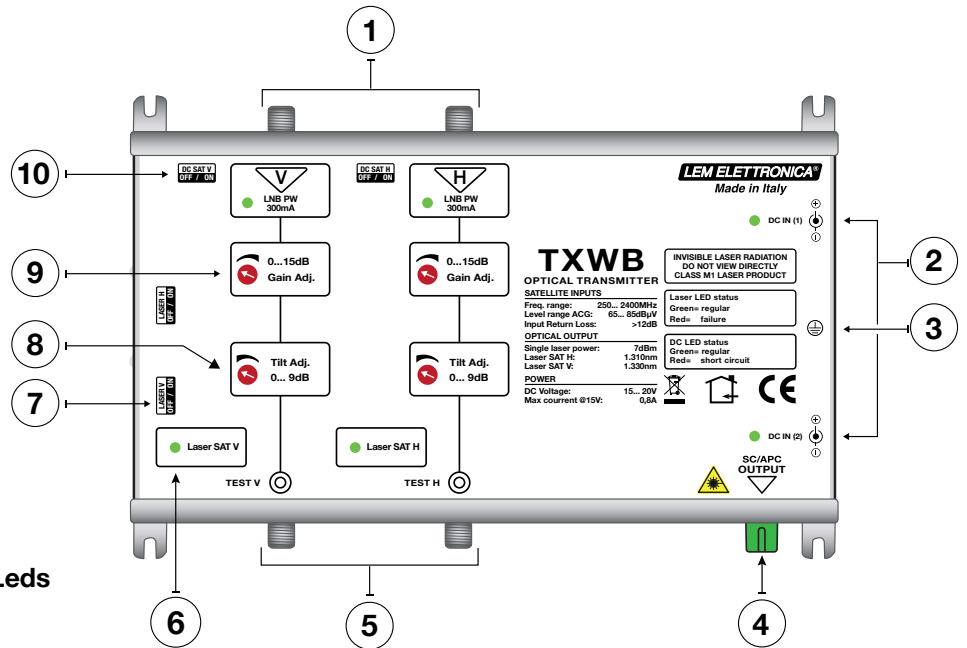
01 TXWB Optical transmitter

01 Power supplier unit (100-240Vac 0,5A Max / Output: 15Vdc 1,25A)

08 6x30mm fixing plugs with 4,5x40mm screws

01 User manual

- 1 Wide Band LNB V - H inputs
- 2 DC Inputs and power Leds
- 3 Earth terminal
- 4 SC/APC Optical Output
- 5 Satellite V-H Test/Monitor
- 6 Laser status Led
- 7 Laser ON/OFF switches
- 8 Satellite V-H slope adjusters
- 9 Satellite V-H gain adjusters
- 10 Remote power feeding switches and Leds



## LED MONITOR DESCRIPTION

### DC Input Led

OFF= No power at the DC input

Green= DC Power

### Laser Led

OFF= Laser switched OFF

Green= Laser switched ON

Red= Laser malfunction

### Remote power Led

OFF= No power

Green= Remote power feeding active

Red= Short circuit

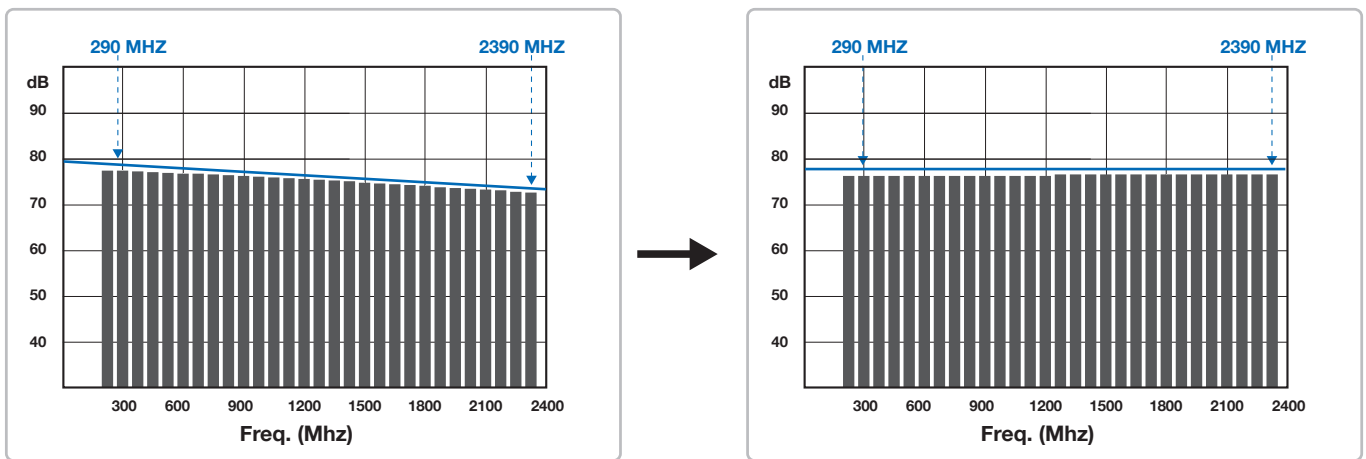
## Satellite V e H Wide Band inputs adjustments.

Because of possible different levels of propagation due to weather conditions the **TXWB** Wide Band inputs are equipped with automatic Gain Control circuits. For perfect signal loss compensation and negative slope equalization of the coaxial cable between the LNB WideBand and the transmitter inputs no additional devices are required. The **TXWB** Satellite V and H inputs have built-in pre-amplifiers and tilt adjusters.

**For optimal working range of the A.C.G. circuits please set-up the slope and signal level of each input first.**

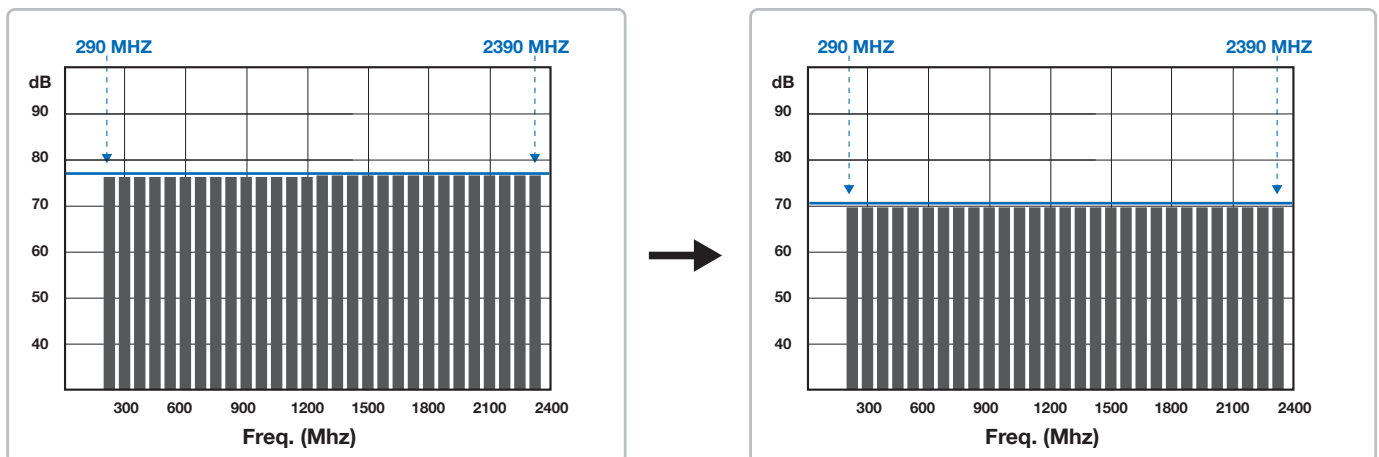
### Tilt adjuster

- 1\_Activate at least one V or H for LNB power feeding.
- 2\_Connect a Satellite Signal Meter in spectrum mode to the **TEST V** port (Vertical polarization) of the **TXWB** transmitter. Rotate the **VSlope** adjuster until the spectrum appears flat.

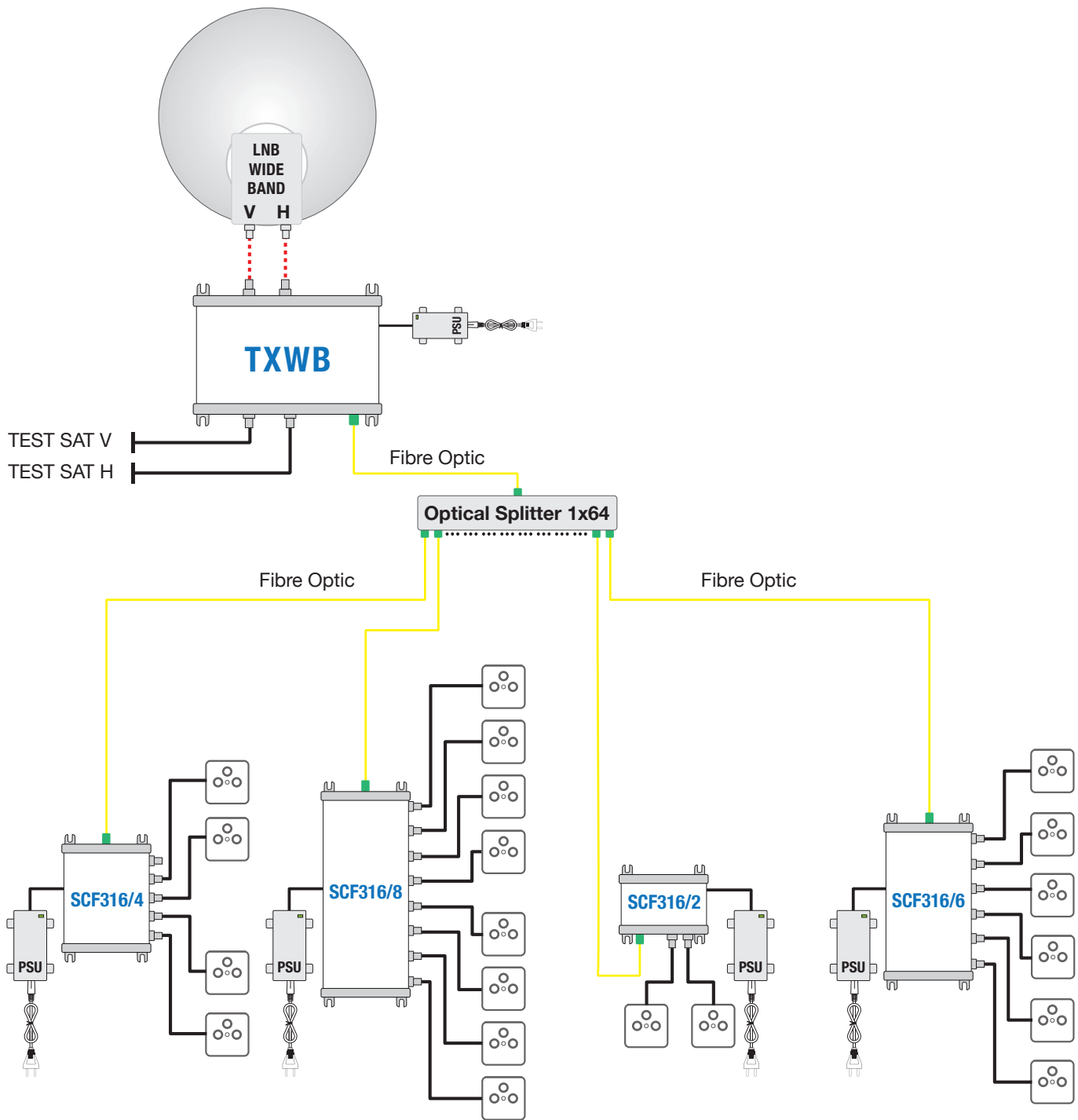


### Input pre-amplifier gain adjustment

- 1\_Select with the Satellite Signal Meter a transponder and operate on the **VGain** adjuster to obtain a level comprised between 70 and 75 dB $\mu$ V.



**To set-up the H horizontal Wide Band input connect the Satellite Signal Meter to H Test port and repeat step by step the same procedure applied for the input.**



 SAT/dCSS/Legacy

The headend **TXWB** converts and transmits over a single-mode fibre optical cable all the transponders of a satellite received from a Wide Band LNB. The optical signals are received by the **SCF316** series optical multiswitch and converted into RF ready for a single or multi-dwelling coaxial distribution. Each **SCF316** series output provides satellite signals supporting the legacy or SCR/dCSS standards (AUTO-SWITCH).

# Label with serial and tracking data

AA1000015019-X1020L

The diagram shows the label 'AA1000015019-X1020L' with brackets and lines indicating the following breakdown:

- AA: Model
- 100001: Serial #
- 50: Manuf. Week
- 19: Manuf. Year
- X: separator
- 10: HW Rel.
- 20: FW Rel.
- L: final character

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