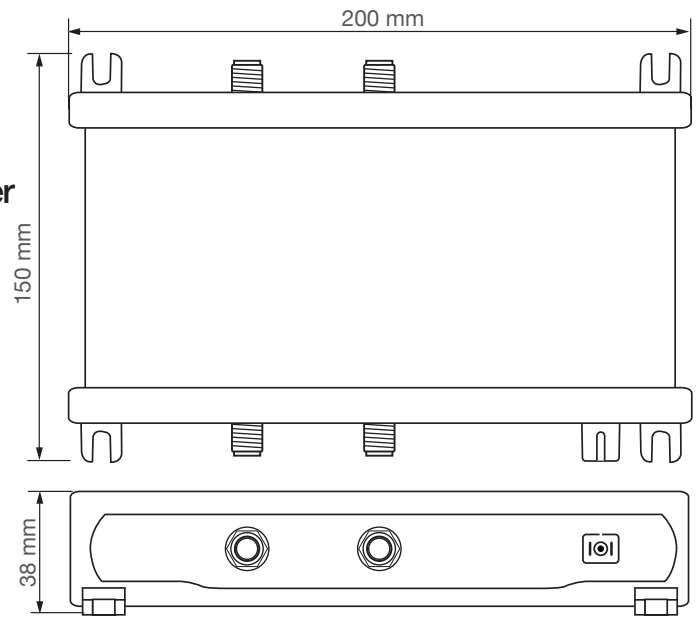


TXWB

Optical Transmitter User manual







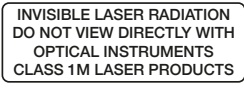


- Satellite integrated gain and slope adjustable amplifier
- LNB and TV power feeding
- Test and Monitor for each input
- Optical monitor Led for each Laser
- Double DC input for redundant power supply



Ready for **UHDTV** **MADE IN ITALY**

Rel. 1.1

OPTICAL TRANSMITTER		TXWB
SATELLITE RF INPUTS	n°	2
RF TEST OUTPUTS	n°	2
OPTICAL OUTPUT	n°	1
OPTICAL		
OPERATION WAVELENGTH	nm	1310 - 1330
LASER TYPE		UN-COOLED MULTI QUANTUM DFB
LASER CLASS		1M, EN 60825-1
OUTPUT POWER	dBm	≥7
OUTPUT CONNECTOR		SC/APC
SATELLITE		
INPUTS BANDWIDTH	MHz	250... 2.400
INPUT RANGE LEVEL (ADJUSTABLE)	dBμV	70... 90
A.G.C. RANGE	dB	20
SLOPE ADJUSTER RANGE	dB	0... 9
RETURN LOSS	dB	>12
MAX. LNB REMOTE FEEDING		5W (340mA@14,5VDC)
OTHERS		
DC INPUT VOLTAGE	V	12... 20
MAX. POWER CONSUMPTION WITHOUT EXTERNAL LOAD		3W (200mA@15VDC)
MAX. POWER CONSUMPTION WITH EXTERNAL LOAD		8W (535mA@15VDC)
SHORT-CIRCUIT PROTECTION		ALL INPUTS
DIMENSIONS	mm	135x200x38
OPERATING TEMPERATURE	°C	0... +50

DESCRIPTION OF SYMBOLS AND ELECTRICAL SAFETY	
	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 safety requirements for class II equipment
	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. Connect the power adapter cord to a detachable power supply socket
10. Unplug the apparatus during lightning storms or when unused for long time
11. Only use accessories specified by the manufacturer
12. Do not remove the cover without disconnecting from the mains first
13. Ambient temperature should not be lower than 0°C and higher than 50°C
14. Please allow air circulation around the apparatus



Installation warnings



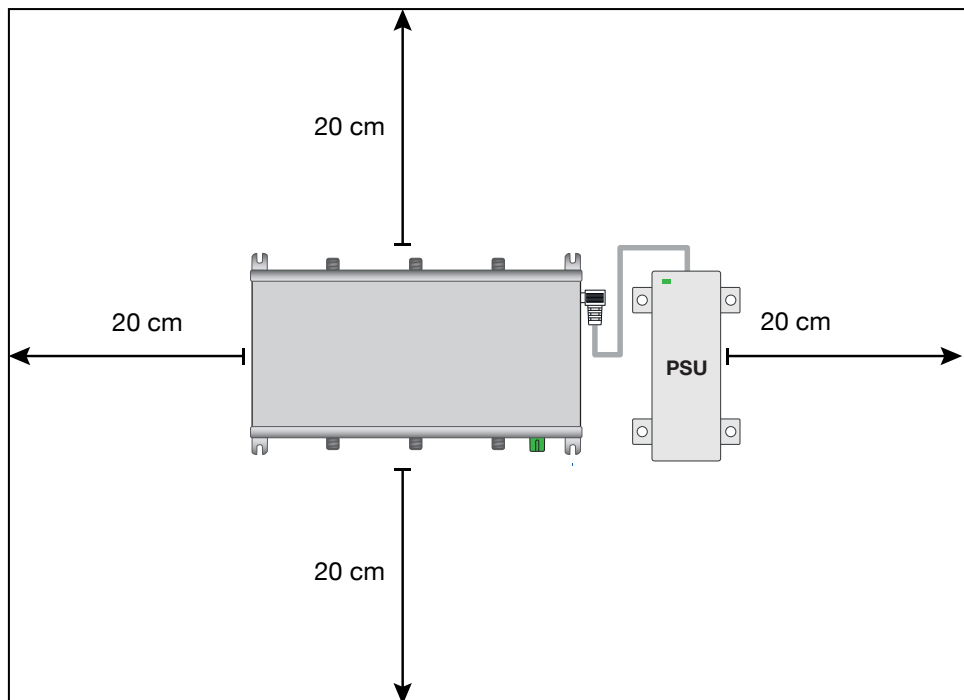
INVISIBLE LASER RADIATION
DO NOT VIEW DIRECTLY WITH
OPTICAL INSTRUMENTS
CLASS 1M LASER PRODUCTS

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 YS25-1501250 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

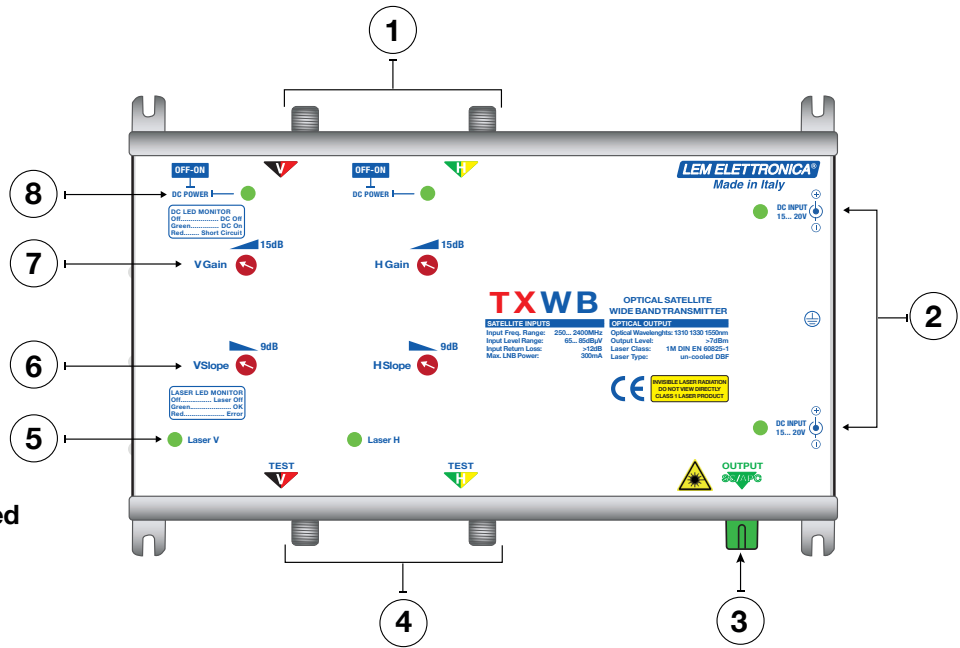
01 Optical transmitter TXWB

01 Power supplier YS25-1501250 (Input: 100-240Vac 0,5A Max / Output: 15Vdc 1,25A Max)

08 6x30mm fixing plugs with 4,5x40mm screws

01 User manual

- 1 V - H Wide Band LNB inputs
- 2 DC Input and power led
- 3 SC/APC Optical Output
- 4 Satellite V-H Wide Band Test outputs
- 5 Optical Link status led
- 6 V-H Slope adjusters
- 7 H-V Gain adjusters
- 8 Remote power feeding switches and led



LED MONITOR DESCRIPTION

DC Input Led

Off= No power at the DC input

Green= DC Power

Led Laser

Off= Laser inactive

Green= Laser active

Red= Laser malfunction

Remote power Led

Off= No power

Green= Remote power feeding active

Red= Short circuit

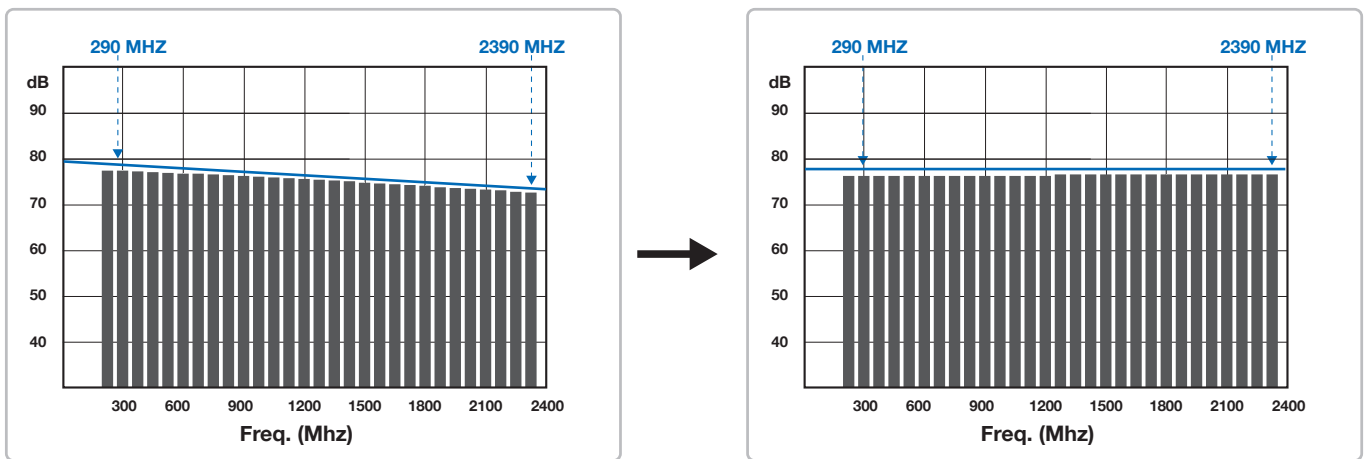
Satellite V e H Wide Band inputs adjustments.

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.

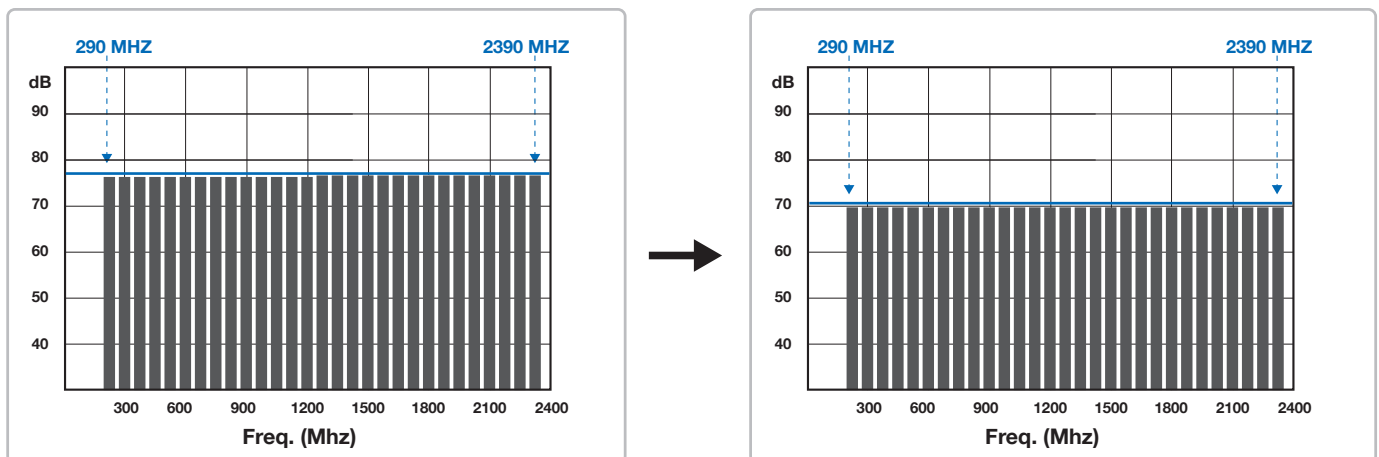
Tilt adjuster

- 1_Activate at least one V or H to 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.

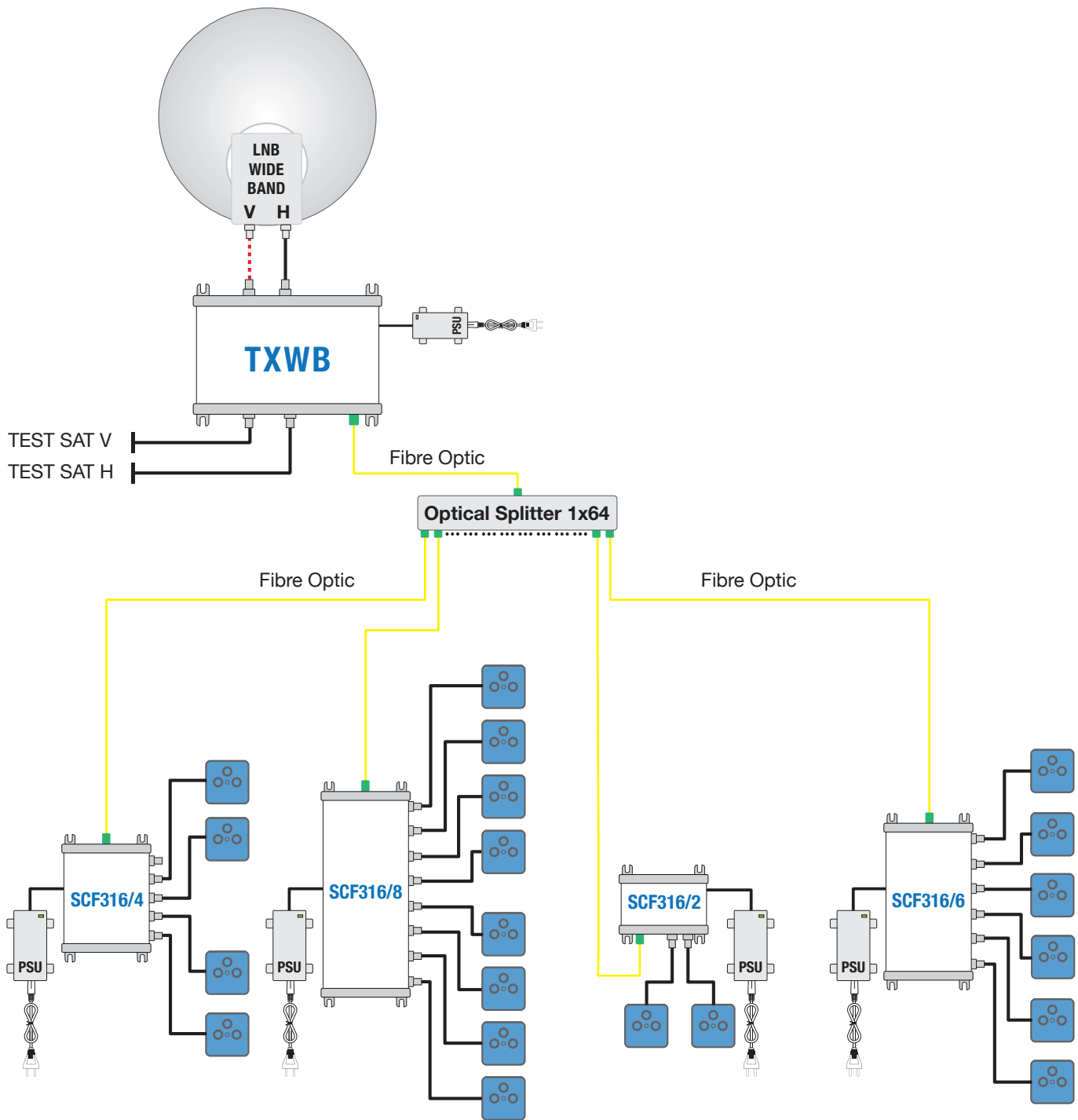


Input pre-amplifier gain adjustment

- 1_Select with the Satellite Signal Meter a transponder in measure mode from the and operate on the **VGain** adjuster to obtain a level comprised between 70 and 75 dB μ V.



To set-up the H horizontal Wide Band input connect the Satellite Signal Meter to H Test port and repeat the same procedure applied for the step before operating on the H SLOPE and GAIN adjusters.



 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

AA	100001	50	19	-X	10	20	L
└──┬──┘	└──┬──┬──┬──┬──┬──┘	└──┬──┘	└──┬──┘		└──┬──┘	└──┬──┘	
Model	Serial #	Manuf. Week	Manuf. Year		HW Rel.	FW Rel.	