## **TXWBTe** Fibre Optic Transmitter

Multi-wavelength system

Wide Band LNB inputs

SAT inputs with A.G.C.

Supplied with power supply



.EM ELETTRONICA®

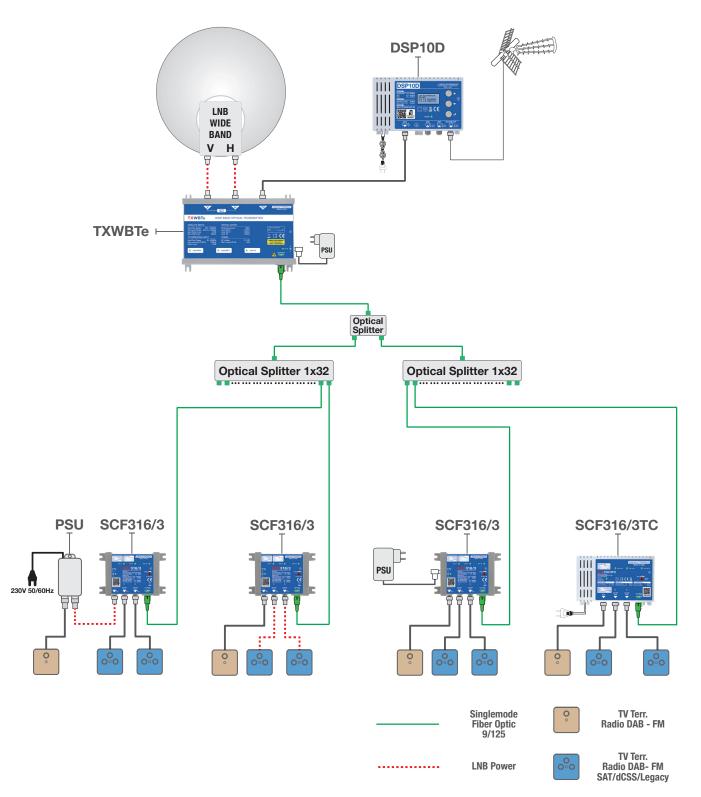
Three-wavelength optical transmitter for the distribution of an entire satellite orbital position, digital terrestrial TV, and FM and DAB radio services over a single single-mode optical fiber. This Optical Transmitter is built with low-distortion, high-linearity DFB lasers.



MODEL		ТХШВТе
RF INPUTS	n°	3
OPTICAL OUTPUT	n°	1
OPTICAL		
OUTPUT WAVELENGTH	nm	1310 - 1330 - 1550
LASER TYPE		UN-COOLED MULTI QUANTUM DFB
LASER CLASS		1M, EN 60825-1
OUTPUT POWER	dBm	6
OUTPUT CONNECTOR		SC/APC
RETURN LOSS	dB	>40
SATELLITE		
INPUTS BANDWIDTH (for Wide Band LNB)	MHz	250 2.400
INPUT RANGE LEVEL	dBµV	70 90
A.C.G. RANGE	dB	20
INPUT RETURN LOSS	dB	>12
LNB REMOTE FEEDING		4,50W (15VDC/300mA)
TV TERRESTRIAL		
INPUT BANDWIDTH	MHz	80 900
INPUT LEVEL FOR 32 MUX	dBµV	85 90
OTHERS		
DC INPUT VOLTAGE	V	12 20
MAX. POWER CONSUMPTION W/O EXTERNAL LOAD	W	2,8
MAX. POWER CONSUMPTION WITH EXTERNAL LOAD	W	7,3
SHORT-CIRCUIT PROTECTION		ONLY SAT INPUTS
DIMENSIONS	mm	146x200x38
OPERATING TEMPERATURE	°C	0 +50



## **Connection Diagram**



## Distribution of signals from a single satellite and terrestrial TV over a single optical fiber using SCF316 series optical multiswitches.

The signals transmitted via satellite from a single orbital position are received by a Wideband LNB, while terrestrial signals (DTT, FM, DAB) are filtered and equalized by a **DSP10D** programmable headend.

The **TXWBTe** transmitter converts these signals into optical format, enabling distribution over a single single-mode optical fiber. Signal reception is handled by **SCF316** series multiswitches, which convert the optical signal back to electrical, making it available again over coaxial cable.