

GTD91XXD

1550nm External Modulation Laser Transmitter



1.1 Product overview

GTD91XXD external modulation laser transmitter product is a new type of high-performance 1550nm external modulation CATV optical transmitter. Transmitter is the 1U height, and can be easily installed in 19" rack. 1527/1529 transmitter is the 1550 dual-wavelength 7dBm/9dBm optical output, the output signal spectral lines is narrow, more advantages in the long-distance transmission. The main devices adopt DFB low-noise, narrow linewidth, continuous-wave lasers with thermoelectric cooling device made in AOI, EMCORE and MITSUBISHI, AVANEX CATV high linearity external modulator. Because of the international brand adoption of key components and our company system optimization control technology, SMNP network control technology, the machine's technical performance indicators fully measure up the standard of similar imported equipment, it can provide high-quality images, digital or compressed digital signal long-distance transmission for cable television and telephone communications.

1.2 Features

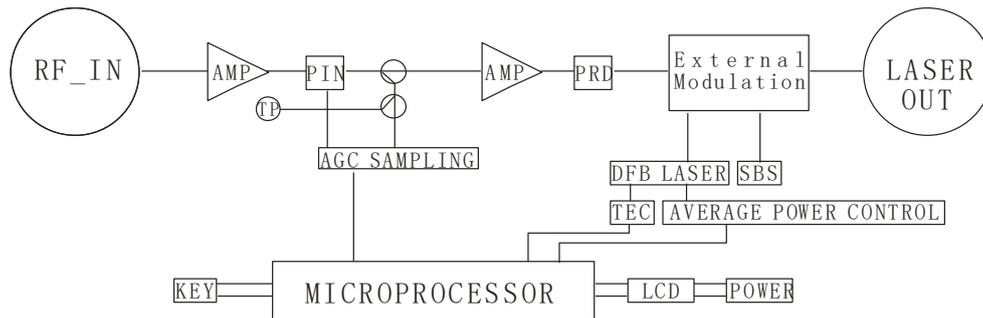
- High quality: original system optimization control technology and RF pre-distortion technology ensure that the system can acquire the maximum CTB, CSO, and SBS targets in the case of excellent performance CNR.
- Flexibility: In ensuring the high performance system CSO, the phase modulation technology of external modulator maximize the optical power into the fiber in order to obtain long-distance transmission, and the field adjustable SBS threshold, 13,16,19, may apply a different network transmission
- Reliability: The 19"1U standard rack, built-in high-performance dual switching power supply, it can work in the backup at 85 ~ 265Vac City Network Voltage, MS-level automatic switching; chassis cooling automatic temperature control.
- Intuitive: The laser is the most expensive machine components, machine equipped with microprocessor monitors the working state of the laser, the panel LCD window displays the operating parameters.
- Network type: Select All-piece status monitoring transponder guarantee to meet the national standard and be

compatible with the SCTE HMS standard, it enables network management monitoring capabilities.

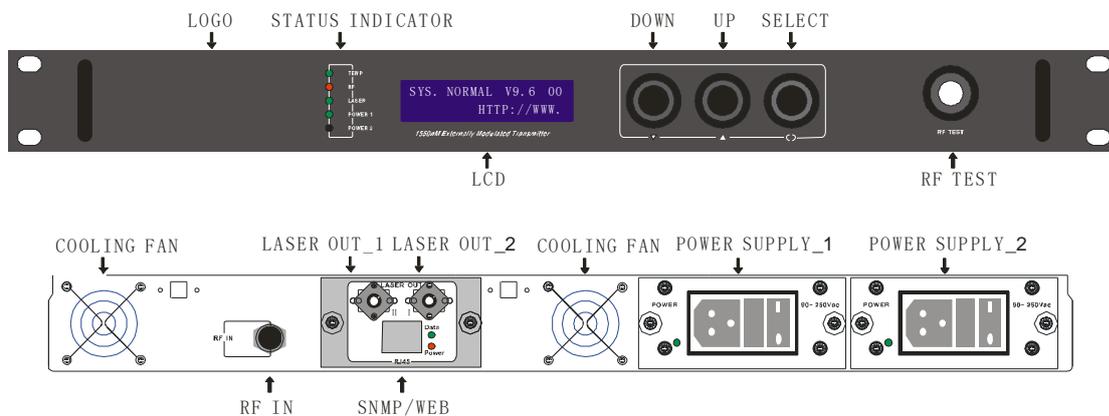
- Plug type of power: Use the aluminum structure plug type of switching power, which is beneficial to heat dissipation and replacement and dual power supply cold and hot backup.

2 Product structure diagram

2.1 Electrical block diagram



2.2 The transmitter' s front panel, back panel diagram



3 Main technical indicators

Item	Units	Parameter	Note
Wavelength	Nm	1550±10	
Optical Modulation		external modulation	

Optical output power	dBm		See specifications
SBS threshold	dBm	16(default)	Optional 13,14,15,16,17,18/19
Optical Connector		Optional FC/APC SC/APC	Specified before ordering
Frequency range	MHz	47~1000	
CNR	dB	≥53.0	GY/T143-2000 6.2.3.5
Flatness	dB	±0.75(860MHZ) ±1.5(1000MHZ)	GY/T143-2000 6.2.4
RF input level	dBuV	75~85	AGC automatic control
C/CTB	dB	≥65.0	GY/T143-2000 6.2.5
C/CSO	dB	≥65.0	GY/T143-2000 6.2.6
RF input impedance	Ω	75	
RF Input Return Loss	dB	> 16	GB/T11381.1 4.2.2.2.5
VCC	V	90~265Vac	Optional -48VDC
Power	W	≤50	Single-supply operation
Working Temperature	°C	0~50	Automatic temperature control
Storage temperature	°C	-20~85	
Working relative humidity	%	20%~85%	
Size	"	19"×11"×1.75"	(W) x (D) x (H)
Network management interface		RJ45	supporting The browser and SNMP