



PT-1550E-E 1550nm External Modulation Optical Transmitter

Content

Product overview

PT-1550E-E Series External modulation optical transmitter is an economical type of high-performance 1550nm external modulation optical transmitter. It is designed especially for second-stage service area, CNR ≥ 50.50 dB when tested in 59CH PAL/D, SBS set at 13dBm, point to point 50km fiber. Mounted in standard 1U, 19" chassis, the output signal spectral lines is narrow, more advantages in the long-distance transmission. Key components adopt DFB low-noise, narrow line-width, continuous-wave lasers with thermoelectric cooling device made in JDSU, Fujitsu, MITSUBISHI and 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.

Features

- (1) 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.
- (2) 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 may apply a different network transmission.
- (3) 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.
- (4) 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.
- (5) 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.

Technical specification

Item	Units	Parameter	Note
Laser type		DFB laser	
Wavelength	nm	1550±10	Specify before ordering
Optical Modulation		External modulation	
Optical output power	dBm	1x5	1x3,1x5,1x7,1x9
SBS threshold	dBm	13	Optional 13,16
Optical Connector		SC/APC or FC/APC	Specify before ordering
Frequency range	MHz	47~750 (862)	
CNR	dB	≥50.5	See test condition in note
Flatness	dB	±0.75	
RF input level	dBuV	78~88	AGC automatic control
C/CTB	dB	≥65.0	
C/CSO	dB	≥65.0	
RF input impedance	Ω	75	
RF Input Return Loss	dB	≥16(47~550)MHz	
		≥14(55~50(862)MHz	
Voltage	V	90~265VAC	Optional -48VDC
Power consumption	W	≤50	Single-supply operation
Working Temperature	°C	0~50	Automatic temperature control
Storage temperature	°C	-20~85	
Relative humidity	%	20%~85%	
Size	"	19"×11"×1.75"	(W)×(D)×(H)
Network management interface		RJ45	Supporting the browser and SNMP
Weight	Kg	5	

Note :

(1) In the condition of stipulated link-loss, configured in 59 PAL-D analog television channel signals within 550MHz frequency, in the range of 550MHz ~ 750 (862) MHz frequency transmit digital modulation signals, digital modulation signal level (in 8MHz bandwidth) is 10dB lower than the analog signal carrier level, when the optical input power is 0dBm, you can measure the carrier combination triple beat ratio (C/CTB), carrier combination of second-order beat ratio (C/CSO) and the carrier to noise ratio (C/N)

(2) Fiber: 50KM+EDFA

Product series

Model	1550nm External Modulation Optical Transmitter(Economical type) SBS=13/16 CNR≥50.5dB
PT-1550E-E-1X3	Single optic port, Optical power≥3dBm
PT-1550E-E-1X5	Single optic port, Optical power≥5dBm
PT-1550E-E-1X7	Single optic port, Optical power≥7dBm
PT-1550E-E-1X9	Single optic port, Optical power≥9dBm