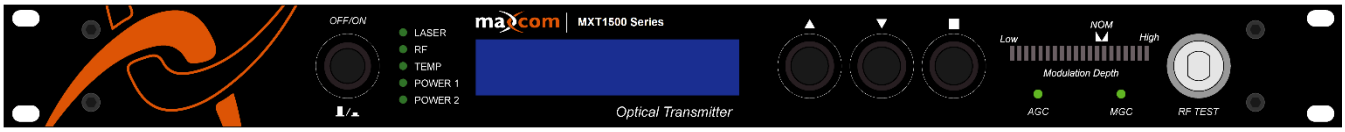

1550nm Direct Modulation Optical Transmitter · MX-T1500E Series

Economic Signal Transport

Technical Specification

PRODUCT DESCRIPTION

The Maxcom MX-T1500E is a 1550nm direct modulation optical transmitter with high index and AGC function. Maxcom incorporates a high linearity and a low chirp DFB laser, built-in pre-distortion compensation and AGC, APC, ATC closed loop control, which improve the performance index. It may be used in a FTTx application for transmitting Digital QAM CATV and DOCSIS RF signals over fiber. Optimized for networks under 20km using an EDFA. MX-T1500E optical transmitter: Standard CATV wavelength

- Part Numbers:
- MX-T1506E-AC (Transmitter with +6 dBm output and Dual AC Power Supplies)
- MX-T1506E-DC48 (Transmitter with +6 dBm output and Dual -48VDC Power Supplies)

PRODUCT FEATURES

- Low chirp, high linearity DFB laser, chirp compensation.
- Dual module RF driver, highly efficient laser pre-distortion adjustment.
- Dual Power Supplies (AC or -48VDC)
- Full-automatic OMI control, AGC & MGC.
- Modulation status display.
- Standard optical output is +6 dBm
- Auto temperature control to ensure long laser life.
- Commonly used in RFoG or RF Overlay networks 20km or less, while maintaining good MER
- Designed for All Digital (QAM) RF Signal Transmission

Technical Index

Performance			Index	Supplement
Optic feature	Wavelength	(nm)	1548~1563	MX-T1506E: CATV wavelength
	Linewidth	(MHz)	≤1	FWHM(Δλ)
	Side mode suppression ratio	(dB)	≥45	SMSR
	Extinction ratio	(dB)	≥20	Xp
	Equivalent noise intensity	(dB/Hz)	≤-160	RIN (20~1000MHz)
	Output power	(dBm)	+6	
	Return loss	(dB)	≥55	
	optical fiber connector		SC/APC	
RF feature	Bandwidth	(MHz)	47~1000	
	Input level	(dBmV)	20±2	MGC
	Flatness	(dB)	≤±0.75	47~1000 MHz
	Return loss	(dB)	>16	
	Input impedance	(Ω)	75	RF/INPUT
	RF test	(dB)	0±1	
Link feature	Transmit channel		PAL-D/60CH	NTSC/80CH
	CNR	(dB)	≥50	-1dBm receive
	CTB	(dB)	≤-63	
	CSO	(dB)	≤-57	
	SBS restrain	(dBm)	≥17	Optimized for good MER performance up to 20km in RFoG or RF Overlay
General feature	Network Mgmt. interface		RJ45, RS232	Support I.E., & SNMP
	Power supply (Dual)	(V)	90~265AC power	-48VDC optional
	Power Consumption	(W)	≤50	Dual power supplies
	Operating temp.	(°C)	-5~65	Auto temp. control
	Storage temp.	(°C)	-40~85	
	Relative humidity	(%)	5~95	
	Size	(")	19×10×1.75	(W)x(D)x(H)