



1310nm Direct Modulation Optical Transmitter · MX1000T Series

Technical Specification



PRODUCT DESCRIPTION

The Maxcom MX1000T is a 1310nm 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 provide an improved performance index. It may be used for cable television applications for transmitting Digital QAM CATV and DOCSIS RF signals over fiber. LED panel display and front panel control.

- The MX1000T series is available in three power versions (+6, +10.5, +14 dBm)



PRODUCT FEATURES

- Low chirp, high linearity DFB laser, chirp compensation.
- Dual Power Supplies and Dual Fans
- Dual module RF driver, highly efficient laser pre-distortion adjustment.
- Full-automatic OMI control, AGC & MGC.
- LED Modulation status display. LED display status screen and front panel adjustments.
- Auto temperature control to ensure long laser life.
- Commonly used in Cable TV RF over Fiber applications





Technical Index

| Performance | | Index | Supplement | |
|-----------------|-----------------------------|---------|--------------------------------------|--|
| Optic Feature | Wavelength | (nm) | 1310±10 | MX1000T |
| | 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 +10.5 +14 Based on Model | Optional Models: MX1000T-4MW = +6 dBm MX1000T-12MW = +10.5 dBm MX1000T-26MW = +14 dBm |
| | Return loss | (dB) | ≥55 | |
| | optical fiber connector | | SC/APC | |
| | | | | |
| RF feature | Operational bandwidth | (MHz) | 47~1000 | |
| | Input level | (dBmV) | 20±4 | 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) | ≥52 | -1dBm receive |
| | CTB | (dB) | ≤-70 | |
| | CSO | (dB) | ≤-63 | |
| General feature | Network Mgmt. interface | | RJ45, RS232 | Supports I.E., & SNMP |
| | Power supply | (V) | 90~265AC power | -48VDC optional |
| | Power Consumption | (W) | ≤50 | Dual power supply |
| | Operating temp. | (°C) | -5~65 | Auto temp. control |
| | Storage temp. | (°C) | -40~85 | |
| | Relative humidity | (%) | 5~95 | |
| | Size | (") | 19×14.25×1.75 | (W)x(D)x(H) |



Provided by: Mega Hertz | 800-883-8839 | info@go2mhz.com | www.go2mhz.com

<https://www.go2mhz.com/product/1310nm-direct-modulation-optical-transmitter/>