

1550nm External-Modulated Optical Transmitter



Description

Montclair's 1550nm external modulated transmitter offers a cost-effective solution delivering balanced high output power performance for your analog & digital CATV networks.

With the use of Lithium Niobate Modulation (LINBO3) to modulate the 1500nm laser it eliminates the chirp effect associated with 1550nm laser internal modulation. For long reach applications transmitters can be paired with Montclair series of 1550nm optical amplifiers.

Features

-)] High power balanced output (2 ports)
-)] Low noise figure for excellent CNR
-)] Pre-distortion AGC RF circuit digital adjustable gain (0.5dB precision)
-)] Compatible with frequency properties NTSC, CENELEC, and PAL
-)] High CSO, CTB, XMOD performance
-)] High performance SOC with 12BitD/A with precise digital laser temperature and power control
-)] LCD front panel display
-)] Flexible monitoring interface for RJ45, RS232, and SNMP
-)] 1RU 19" rack-mount chassis

Applications

-)] CATV networks
-)] FTTx PON networks

Product Reliability & Assurance

Backed by over 20 years of engineering and manufacturing experience each amplifier is strictly qualified and adhered to rigorous standards to guarantee you a maintenance-free and optimal performance network. A two year limited warranty is offered with each amplifier.

Product Support

Our depth of technical support from an experienced staff is provided at every level to ensure each product configuration and characteristic is specific to your application. Continuous support throughout!



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Specifications

Optical specifications

Parameters	
Laser type	1550nm DFB LD
Optical wavelength	1550nm±10nm or ITU grid
Noise level	≤ -160dB/Hz
Optical output path	2 ports balanced output power
SBS suppression threshold	13 - 19dBm
Connector type options	FC/APC & SC/APC

RF specifications

Parameters	
RF bandwidth	45 - 870MHz
RF input impedance	75Ω
RF input return loss	≤ -16dB
RF interface type	F type female
RF input voltage	15 to 25dBmV/ch with AGC control; OMI/ch=3%±0.25%
Test point	15±1dBmV/ch AGC mode @ 77 channels
Flatness	±0.75dB
CNR	> 54dB; > 52dB
CSO @ 60 CH.PAL-D	≤ -65dBc

Environmental specifications

Parameters	
Power supply	90 ~ 260V AC; 50/60Hz
Power	65W Max
Working temperature	0 ~ +50 °C
Storage temperature	-20 ~ +60 °C
Humidity	85% Max

Physical specifications

1RU rack-mount chassis dimensions		
W x D x H	mm	inches
1RU rack-mount chassis		
Power supply: Single -48V DC	485 x 490 x 45	19.3 x 19.1 x 1.77

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Ordering information

M - OTX - EM - 5 5 - **1** - R - **2** - **3**

1. Total output power (dBm):

- 2x4** 8dBm total power
- 2x5** 9dBm total power
- 2x6** 10dBm total power
- 2x7** 11dBm total power
- 2x8** 12dBm total power
- 2x9** 13dBm total power
- 2x10** 14dBm total power

2. Power supply:

- A** -48V DC single
- AA** -48V DC dual
- B** 220V AC single
- BB** 220V AC dual
- C** 110V AC single
- CC** 110V AC dual

3. Output adapter ports:

- AFC** FC/APC
- ASC** SC/APC

Note:
Transmitters in 1RU dimensions for 19" rack