

1550nm Direct Modulated Optical Transmitter

Key Features

- » Transmits NTSC, PAL, ATSC, and related digital information for CATV and/or telephony applications
- » Available in 6 and 10dBm output power
- » High linearity, optically isolated, distributed AM feedback DFB laser
- » 47-1003MHz RF input bandwidth
- » Front panel RF test point (-20dB)
- » Microprocessor-controlled diagnostics, front panel LCD display and controls
- » Automatic Gain Control (AGC) and Manual Gain Control (MGC) override
- » Integrated SNMP network interface
- » Dual hot-pluggable redundant power supplies



Description

Multicom's Direct Modulated MUL-1550TX Transmitters deliver high performance signal transmission of NTSC, PAL, ATSC, QAM, and related digital information for CATV and/or telephony applications. Based upon custom high-linearity optically isolated DFB (Distributed Feedback) lasers, the built-in control circuits provide an exceptionally low noise and inter-modulation characteristics. These units have a patented predistortion circuit as well as actual fiber optic distance adjustment.

The units are packaged in slim 1.75-inch high (1RU), 19-inch aluminum rack-mounted enclosures. Each unit includes dual redundant self-contained power supplies with 110-250VAC inputs.

P/N	Output Power	
MUL-1550TX-V-1-06	6 dBm	
MUL-1550TX-V-1-10	10 dBm	

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Product Specifications

Description

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Technical Specifications

	Specifications	Values	Notes
General	Operating temperature	0 - 45°C	32 - 113°F
	Storage temperature	-20 - 65°C	-4 - 150°F
	Operating relative humidity (%)	95	Max, Non-condensing
	Power Supply (VAC)	110 - 250	50Hz/60Hz
	Power consumption (W)	30	Typical
	Size (L x W x H)	19" x 15" x 1.75" (1RU)	483 x 380 x 44 mm
	Weight	8 Lb	3.6 Kg
	Interface port 1	RS232	Network parameter config.
	Interface port 2	RJ45	SNMP, IEEE802.3, 10BaseT
	Power supplies	2	Hot pluggable, redundant
Optical	Wavelength (nm)	1550	±10
	Output power (dBm)	6 and 10	Depending on model
	Optical connector	SC/APC	Alternative options available
	Dispersion compensation distance (KM)	≤50	31 Miles
	Laser Type	DFB - ORTEL	
	Optical modulation mode	Direct optical intensity modulation	
RF	Bandwidth (MHz)	47 - 1003	
	Input level (dBmV)	15 - 25	
	Flatness (dB)	-0.75 - +0.75	
	Return loss (dB)	≥16	
	Connector (Main input)	F type	75Ω impedance
	C/CSO (dB)	≥60	25 Km optical fiber
	C/CTB (dB)	≥65	OdB received
	C/N (dB)	≥51	
	AGC control range (dB)	±5	
	MGC control range (dB)	0 - 20	
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