



# 1310nm Intelligent Direct Modulated Optical Transmitter

## Key Features

- » High linearity, optically isolated, distributed AM feedback DFB laser
- » Transmits NTSC, PAL, ATSC, and related digital information for CATV and/or telephony applications
- » Available in 7.7, 10, 12, 14 and 14.9 dBm output power
- » 47-1003MHz RF input bandwidth
- » Front panel RF test point
- » 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

The MUL-1310TX-V-1-X intelligent directly modulated optical transmitter is mainly used in 1310nm optical fiber transmission systems. It uses a DFB laser with an optical output power of 7.7, 10, 12, 14 and 14.9 dBm, and advanced intelligent electronic predistortion compensation technology.

This intelligent directly modulated optical transmitter is one of the most important components to build a CATV-HFC network. It is mainly used to transmit analog video, digital television signal, telephone voice signal and data (or compressed data) signal. This Multicom product provides a high quality low cost transmitter solution for a 1310nm optical fiber CATV system.

P/N	Output Power	P/N	Output Power
MUL-1310TX-V-1-7.7	7.7 dBm	MUL-1310TX-V-1-14	14 dBm
MUL-1310TX-V-1-10	10 dBm	MUL-1310TX-V-1-14.9	14.9 dBm
MUL-1310TX-V-1-12	12 dBm		

[www.multicominc.com](http://www.multicominc.com)

Multicom, Inc.  
Ph: 800-423-2594  
Fax: 407-339-0204  
Email: [multicom@multicominc.com](mailto:multicom@multicominc.com)



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## Product Specifications

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### Technical Specifications

Item	Unit	Technical Parameters
Optical output power	dBm	7.7, 10, 12, 14, 14.9
Optical wavelength	nm	1310 ± 20
Laser type		ORTEL DFB laser
Optical modulation mode		Direct optical intensity modulation
Optical connector type		SC/APC
Frequency range	MHz	47-750 / 862 / 1003 (depending on selected channel load)
RF input level	dBμV	72 - 88 (+12 to +28dBmV)
Flatness in band	dB	± 0.75
RF input impedance	Ω	75
Input return loss	dB	≥ 16 (47 - 550MHz); ≥ 14 (550 - 1003MHz)
C/CSO	dB	≥ 60
C/CTB	dB	≥ 65
C/N	dB	≥ 51
AGC control range	dB	± 5
MGC control range	dB	0 - 20
Power supply voltage	V	AC 110V - 250V (50/60Hz) (redundant power)
Consumption	W	30
Operating temperature	°C	0 - +45 (+32 - +113°F)
Storage temperature	°C	-20 - +65 (-4 - +150°F)
Relative humidity	%	Max 95% no condensation
Dimensions	mm	483 (W) x 380 (D) x 44 (H); (19in W x 15in D x 1.75in H)

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MUL-1310TX-V-1-7.7	7.7 dBm	MUL-1310TX-V-1-14	14 dBm
MUL-1310TX-V-1-10	10 dBm	MUL-1310TX-V-1-14.9	14.9 dBm
MUL-1310TX-V-1-12	12 dBm		

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Email: [multicom@multicominc.com](mailto:multicom@multicominc.com)