



DATA SHEET

ACTIVE OPTICS



1550nm Optical Transmission

CATV 1550nm Directly Modulated Optical Transmitter (DMTX)

Introduction

The C-COR range of 19" rack mountable 1550nm Optical Transmission products enable deployment of cost-effective video/data transmission solutions over CATV and PON networks. Sourced from C-COR's Taiwan manufacturing facilities, the products provide a reliable source of optical transmission for RF Video and data applications.

The C-COR range of 1550nm Directly Modulated Optical Transmitter (DMTX) devices contain high-quality, highly linear DFB laser with built in pre-distortion compensation, Automatic Gain Control (AGC), Automatic Power Control (APC) and Automatic Temperature Control (ATC). These 1550nm Optical Transmitters can be used, together with C-COR's EDFA and EYDFA products, for cost advantage in:

- CATV transmission systems, and;
- PON networks with RF video overlay.

The C-COR 1550nm Optical Transmitters provide superior CNR, CTB and CSO performance and adjustable Optical Modulation Index (OMI) allows individual network performance to be optimized.

Hot-swappable dual AC/DC power supply options for redundant powering protection and field replaceable fan design provides for higher reliability operation. The technology provides a versatile and reliable integrated solution for operators to scale their network growth according to needs.

This C-COR 1550nm Optical Transmitter range is widely used for multi-content, wide distribution FTTH system requirements and is suitable for RF signal distribution over fibre.

Management of the product is provided by front panel LCD display, SNMP, Web based and RJ45/RS232 Interfaces.

Features

- 45 to 1,002 MHz bandwidth
- Excellent CNR and distortion performance
- Automatic/manual gain control mode
- Standard RJ45 interface, supporting SNMP and Web remote network management
- Dual AC or DC power supply with automatic backup switching and hot swap.



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Dimensions and Weight

Parameter	Value
Dimensions (Height x Width x Depth) (mm)	44x483x370
Weight (each) (kg)	4.1

Specifications

Optical Parameter	Value
No. of Output Ports	1 / 2
Optical Connector	SC/APC / LC/APC
Operating Wavelength (nm) ¹	1528.77 to 1563.86
Output Power (dBm)	3 to 10
Laser Linewidth (MHz)	≤ 1.0
RIN (dB/Hz)	≤ -160
SMSR (dB)	50
XP (dB)	≥ 20
Optical Return Loss (dB)	≥ 50

Note:

1) ITU-Grid Optional;

Link Parameters	Value
No. of Test Channels	PAL-D / 59CH
CNR (dB)	≥ 51
CTB (dB)	≥ 65
CSO (dB)	≥ 60

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Due to ongoing product
development, technical
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RF Parameter	Value
RF Connector	F-Type Optional: Imperial / Metric
Operating Bandwidth (MHz)	45 to 1,002
RF Input Level (dBμV)	75 to 85
Flatness of TP (45~1,002 MHz) (dB)	-0.75 to +0.75
Return Loss (45-1,002 MHz) (dB)	≥16
Input Impedance (Ω)	75

General Parameters	Value
Operating Temperature (°C)	-5 to +65
Storage Temperature (°C)	-40 to +85
Operating Humidity (%)	5 to 95
AC PSU Voltage (VAC), (@ 50/60 Hz)	90 to 265
DC PSU Voltage (VDC)	-72 to -36
Power Consumption (W) (Dual PSU, 1+1 Standby)	≤ 30

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Contact your local sales representative for product availability in your
area and for other interface and option requirements.