

**FTTH CATV**



**BY FIBER SYSTEM**

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**PRODUCT MANUAL**

**1550NM DIRECT MODULATED OPTICAL TRANSMITTER**

# 1550NM DIRECT MODULATED OPTICAL TRANSMITTER

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# Product Overview

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10mw Standard 1550nm Direct Modulated optical transmitter this is a direct modulation 1550nm DFB transmitter for analog TV, digital TV and CMTS signals local fiber dense distribution and QAM TV Signal long-distance fiber transmission. The transmitter utilizes high linearity DFB laser, RF power digital automatic process technique, along with RF pre-distortion circuit developed by B&A Technology. The built-in microprocessor monitors the transmitter working status and automatically ensures the optimistic performance. OTD1500 is ideal for analog TV fiber distribution within 20Km and QAM TV signal long distance transmission within 100Km.

1550nm optical transmitter is designed according to CATV standard. It modulates CATV RF amplitude signal into 1550nm optical signal and then transmits it to optical node in HFC network through single-mode optical fiber. It is mainly used for TV signal medium-sized network transmission and the distribution network with short distance, it can be amplified after stage.

# Main Characteristics



- The use of high-performance DFB lasers of international famous brands has narrow spectral lines, good linearity, and high output power.
- The advanced multi-frequency RF predistortion technology uses RF power automatic processing technology to ensure the CTB, CSO, and C/N specifications are always at optimal values.
- Modular structure, easy to expand the function of equipment and maintenance.
- Standard network management interface, in line with SNMP network management protocol.
- The 32-bit ARM processor can efficiently coordinate the working status of each module and accurately monitor and control each operating parameter.
- Laser temperature stabilization circuit (ATC) and optical power output stabilization circuit (APC) ensure optimal laser performance.

# Technical Specifications

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Items	Parameters	
<b>Optical parameters</b>	Output optical power	3~10dBm
	Wavelength	1550nm±15
	Laser type	LD/DFB Laser
	Optical modulation	Direct optical intensity modulation
<b>RF parameters</b>	Optical connector	FC/APC&SC/APC (customized)
	Frequency Range	47~860MHz/1000MHz
	RF input level	75~85dBuV
	In-band flatness	±1dB
	AGC accuracy	0.5dB
	MGC adjustment range	0~15dB
	RF input impedance	75Ω
	Input reflection loss	≥16
	C/CTB	≥65
	C/CSO	≥60
<b>Normal Parameters</b>	Carrier to noise ratio(C/N)	≥51
	Supply voltage	AC220V(160V ~ 265V) /AC110V(90 ~130V)/DC48V(38 - 58V)
	Total power consumption	<12W
	Work temperature	-5°C~+45°C
	Relative humidity	95% max, no condensation
	Storage temperature	-30°C~+70°C
	Product size	357(W)*482(L)*44(H)
FCL size (1 set package )		595(W)*490(L)*120(H)
FCL size (2 sets package )		595(W)*490(L)*230(H)
Net Weight		3kgs(single power supply)
Gross weight (1 set package)		4kgs(single power supply)



# CONTACTOS

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