

Overviews

OT1500D is a 1550nm direct modulation optical transmitter with high index and AGC function. It adopts high linearity and low chirp DFB laser, built-in pre-distortion compensation and AGC, APC, ATC closed loop control, which improves the system index obviously. If working with the EDFA, there will be serious CSO deterioration. It can be used in town where the fund is shortage and the distance is less than 10km as a Transition solution.



Feature

- Low chirp, high linearity DFB laser, chirp compensation.
- Full-automatic OMI control, AGC & MGC.
- Dual module RF driver, high efficient laser pre-distortion adjustment.
- Intuitionistic modulation select display.
- Built-in dual back-up power supply, switch automatically.
- Casing temperature auto-control, ensure the long life of the laser.

Specification

Performance	Unit	Index	Supplement
Optic feature			
Wavelength	(nm)	1528.77~1563.86	
Linewidth	(MHz)	≤1	FWHM($\Delta\lambda$)
Side mode suppression ratio	(dB)	≥45	SMSR
Extinction ratio	(dB)	≥20	Xp
Equivalent noise intensity	(dB/Hz)	≤-160	RIN (20~1000MHz)
Output power	(dBm)	6	Optional 3, 10, 12
Return loss	(dB)	≥55	
optical fiber connector		SC/APC	Optional FC/APC

OT1500D-X*XdBm

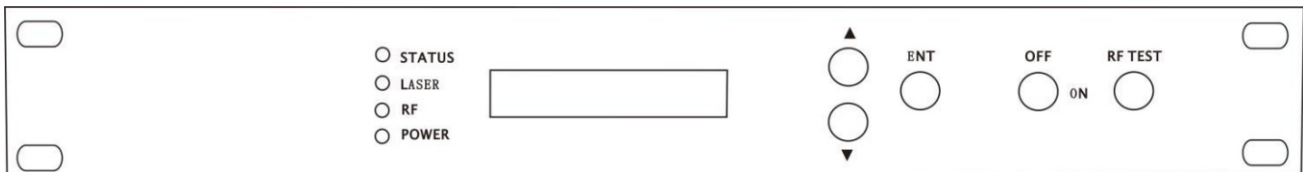
1550NM INTERNAL OPTICAL TRANSMITTER

DATASHEET/JAN 2024

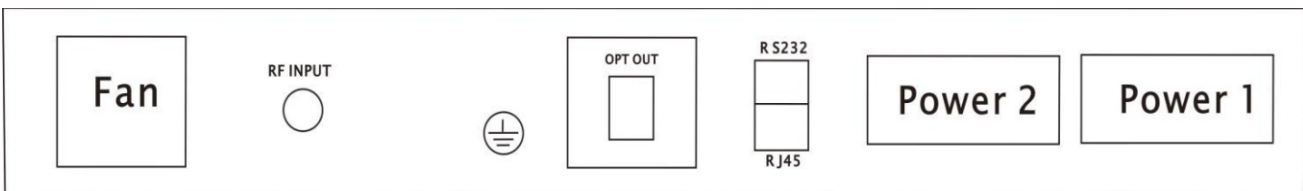
HFC Optical Network Series

RF feature			
Work bandwidth	(MHz)	47-1002	
Input level	(dBuV)	75~85	
Flatness	(dB)	$\leq \pm 0.75$	45~862MHz
Return loss	(dB)	>16	
Input impedance	(Ω)	75	RF/INPUT
Link feature			
Test channel		PAL-D/59CH	
CNR	(dB)	≥ 51	-1dBm receive
CTB	(dB)	≤ -65	
CSO	(dB)	≤ -60	
SBS restrain	(dBm)	≥ 17	
General feature			
Network management interface		RJ45, RS232	Support I.E. & SNMP
Power supply	(V)	90~265 city power	-48VDC optional
Power Consume	(W)	≤ 50	Single power works
Work temp.	($^{\circ}\text{C}$)	-5~65	
Storage temp.	($^{\circ}\text{C}$)	-40~85	
Operating relative humidity	(%)	5~95	

Front Side



Back side



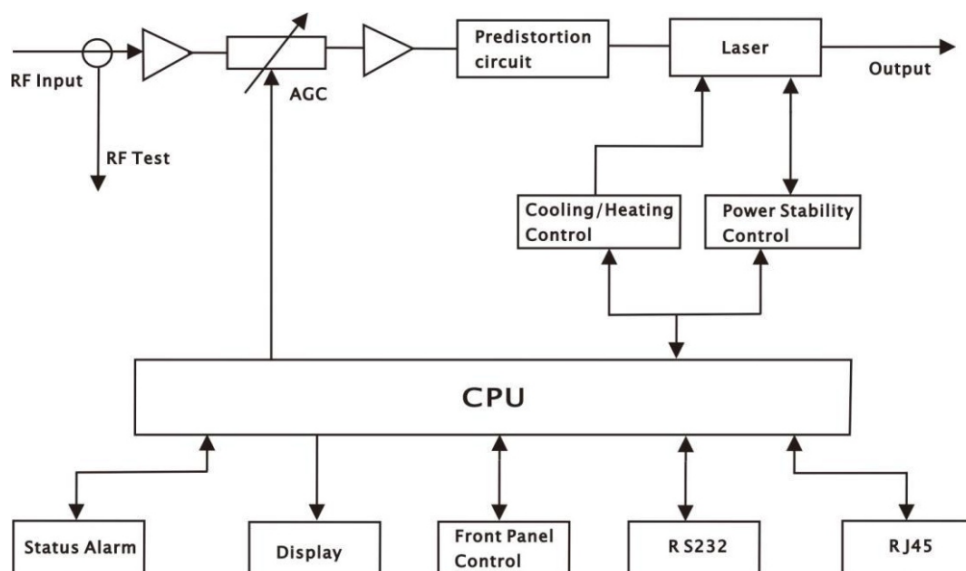
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HFC Optical Network Series

Diagram



Support WEB

SNMP Agent WEB Manager

Device Status

Device Model	Optical Transmitter
Serial Number	200620103375
Device Version	1.9.3
Unit Temperature	33.0 °C
Input RF Level	66.0 dBuV
Laser Driver Level	78.0 dBuV
Laser Status	ON
Laser Wavelength	1555.75 nm
Laser Output	4.3 mW
Laser BIAS	39.0 mA
Laser TEMP	23.8 °C
Laser TEC	0.029 A
DC Power +3.3V	3.3 V
Power Supply 1	Normal
Power Supply 2	Fault

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Our QC team do second test for every ot

