HT2000

1550nm External Modulation Optical Transmitter

Product Overview

HT2000 series is 1550nm externally modulated transmitter with the best performance and the highest index. It is the first choice for long-distance transmission and large area covered local networks. It is applied to: the optical modulation and optical insertion of large and medium-sized 1550nm optical transmission system; the upgrading and expansion of WDM and its related networks. It is the core equipment of 1550nm network transmission system to for triple-play and FTTx.

Features

1. It adopts narrow bandwidth & low-noise DFB laser as signal source, and high linear LiNbO3 external modulator as external signal modulation.

2. The perfect pre-distortion circuit ensures perfect performance of CTB and CSO in high standard CNR value.

3. Advanced SBS dual band suppression circuit, SBS continuously adjustable, adjustment range: 13~19 for different distance networks.

4. Automatic gain (AGC) control enables stable output in different RF input levels.

5. Different networks can be optimized by OMI adjustment.

6. Fully automatic case temperature control, intelligent fans, the fans starts to work when case temperature reaches 30 ℃.

7. Built-in dual standby power supply, hot plug in/out and automatic switching supported.

8. The operating parameters of the whole machine are controlled by microprocessor, and the LCD status display on the front panel has many functions such as laser status monitoring, parameter display, fault alarm, network management, etc.; once the operating parameters of the laser deviate from the allowed range set by the software, the system will alarm promptly.

9. Standard RJ45 interface provided, supporting remote network management of SNMP and WEB, and remote adjustment of AGC, SBS, OMI and other functions.

Main Technical Index

Category	Items	Unit	Index			Remarks
			Min.	Typ.	Max.	
Optical Index	Operating Wavelength	nm	1540		1563	Compatible with ITU wavelength
	No. of Output Ports			2		
	Output Power per Port	dBm	7		10	1dBm interval
	Laser Linewidth	MHz		0.35		
	SMSR	dB	45	50		
	RIN	dB/Hz			-160	RIN（20~1002MHz）
	Optical Return Loss	dB	50			
	Fiber Connector		SC/APC			FC/APC、LC/APC
RF Index	Operating Bandwidth	MHz	47		1002	
	Input Level	dBμV	75	80	85	AGC
	Flatness	dB	-0.75		+0.75	47~1002MHz
	Return Loss	dB	16			
	Input Impedance	Ω		75		
	RF connector		F Metric/Imperial			Specified by user
Link Index	No. of Test Channels		PAL-D/59CH	PAL-D/99CH		
	CNR1（dB）		≥53.0	52.0		TX to RX directly, Rx 0dBm
	CNR2	dB	≥51.0	50.0		Fiber 65km,Rx 0dBm
	CTB	dB	≥65			
	CSO	dB	≥65			
	SBS Suppress	dBm	13		19	Continuous adjustable, each step 0.1

General Index	Network Management Interface		SNMP,WEB supported			
	Power Supply		90		265	AC
			-72		-36	DC
	Power Consumption	W			60	Dual Power Supply, 1+1 standby
	Operating Temp	℃	-5		+65	Auto case temp control
	Storage Temp	℃	-40		+85	
	Operating Relative Humidity	%	5		95	
	Dimension	mm	440×483×44			D、W、H
	Weight	Kg	7.4			

Main Applications

1. Large and medium-sized CATV head-end, large capacity backbone network, ultra long distance transmission.

2. FTTH、FTTx PON、RFOG、Triple-play.

3. Narrow band inserted data services such as IPQAM.

4 .Network upgrading and capacity expansion based on existing optical fiber resource.

5.DWDM System