



RET-1550H series is in line with the international technical standards 1550nm externally modulated optical transmitter, it adopts narrow linewidth (Typ.=0.65MHz) , the light source adopts low noise, and continuous wave DFB laser, in favor of reducing the influence from dispersion; the signal modulator adopts CATV special LiNbO3 external modulator; Based on these innovation technology, it can have back to back CSO \leq -65dB, CTB \leq -65dB, CNR \geq 53dB outstanding performance, SBS 13dBm~18dBm continuous adjustable, 0.5dB stepping. This model has RS232 communication interface for perfect SNMP control, and support back-up power supply. This advanced 1550nm external modulated optical transmitter is a good choice for large and medium-sized cable television center head-end, used for main trunk and distribution network trunk.

PRODUCT HIGHLIGHTS

1. External modulator technology without laser chirp, extremely low dispersion distortion, high extinction ratio, can be used for overlong trunk and high speed communication.
2. Narrow linewidth (typ.=0.65MHz), low noise figure, DFB continuous wave laser, it is advantageous to reduce the influence from dispersion.
3. Max 862MHz/1080MHz work bandwidth option.
4. Excellent CTB, CSO and CNR value.
5. SBS 13~18dBm continuous adjustable, 0.5dB stepping.
6. Support ITU wavelength.
7. AGC/MGC mode is optional at spot, OMI optional at spot.
8. RS232 communication interface and SNMP network management.
9. Back-up power supply optional.
10. Chassis temperature automatically control.
11. High cost-effective 1550nm external modulated optical transmitter.

APPLICATION

1. For center office overlong trunk to transfer RFTV, IF/SAT.
Anlog and digital mixed transmission>200Km ((with using dispersion compensation)
Pure digital transmission (without using dispersion compensation)>400Km, (with using dispersion compensation) >700Km.
2. ITU wavelength optical transmitter is suit for DWDM optical fiber CATV system added value service and CFG dispersion compensation system.
3. Available to the substation FTTH which request high index. Point to Point >65Km, CSO \leq -65dB. It can provide RFTV, IPTV and VOD added value service to second-grade service area with high quality and high reliability. To avoid the CSO degradation and transmission distance limited by using 1550nm externally modulated optical transmitter.

RET-1550H

DATASHEET

Parameter	Unit	Index
Optical Parameter		
Operating Wavelength	nm	1548~1563nm ITU wavelength
Laser Linewidth	MHz	≤0.65
Side mode suppression ratio	dB	≥45
Equivalent noise intensity	dB/Hz	≤-160
Output Port Number	/	2
Output power	dBm	5/6/7/9
Return loss	dB	≥50
Optical Connector	/	SC/APC, FC/APC
RF Parameter		
Work Bandwidth	MHz	47~862/1000/1080
Flatness	dB	± 0.75
Input Level	dBuV	78~88 (AGC)
Input Impedance	Ω	75
RF Return Loss	dB	>15
RF Port	/	F-Female
Link Parameter		
Test Channel Number	/	PAL-D/60CH
CNR1	dB	≥53 (Back to Back) ≥51.5
CNR2	dB	(50KM optical fiber, 0dBm receiving)
CTB	dB	≤-65
CSO	dB	≤-65
SBS	dBm	13~18, 0.5dB stepping
General Parameter		
Power Supply	V	90~265VAC or 48VDC
Power Consumption	W	≤50
Operating Temp.	°C	-5~65
Storage Temp.	°C	-40~85
Operating relative humidity	%	5~95
Communication interface	/	RS232
SNMP network management interface	/	RJ45