

## FWT-1550EH Series 1550nm Advanced Type External Modulated Optical Transmitter



### 1. Product Description

FWT-1550EH series is a model of 1550nm Externally Modulated Optical Transmitter according with current international industry technique standard. The device' s light source adopts narrow line width (Typ.=0.65MHz), low noise and continuous wave DFB laser, which is propitious to reduce the influence of dispersion.

Adopting the LiNbO3 external modulator specially developed and produced by USA Oclaro for CATV signal modulation, and independently developed and designed dual microwave source optimization control technology, which achieves transmission of more than 90KM,  $CNR \geq 52\text{dB}$ ,  $CTB \leq -65\text{dB}$ ,  $CSO \leq -65\text{dB}$ , 47 ~ 862 MHz, SBS: 13-19dBm continuous adjustable. Equipped with SNMP network management, 1 + 1 power supply backup, and chassis temperature automatic control.

The FWT-1550EH series transmits 1550nm externally modulated optical transmitters over long distances, transmitting CATV signals in all bands, especially ensuring low-frequency and high-quality signals. With its high indicators, high reliability, and excellent performance-price ratio, it is suitable for large and medium-sized CATV station's headend, which then used for the trunk and distribution network trunk.

### 2. Product feature

- ◆ Top quality: The original dual microwave source innovation technology and RF predistortion technology ensure the system has the perfect CTB, CSO and SBS indexes when  $CNR \geq 52\text{dB}$ .
- ◆ Flexibility: The phase modulation technology of the external modulator maximizes the optical power of the fiber to obtain long-haul transmission while ensuring the excellent CSO performance of the system, and the SBS threshold is continuous adjustable: 13-19 dBm; AGC / MGC mode selectable at site, OMI can be adjustable, suitable for different network transmissions.
- ◆ High bandwidth: up to 47-1000MHz working bandwidth.
- ◆ Reliability: 19" 1U standard rack, built-in high-performance 1 + 1 hot backup power supply, which can work at 86 ~ 265Vac city network. MS automatic switching, and chassis temperature automatic control.

- ◆ Intuitive: The external modulator and laser are the most expensive components of the device. The built-in microprocessor monitors the external modulator and laser working status, and the working parameters are displayed on LCD.
- ◆ Network management type: SNMP network management, can realize the network management WEB monitoring function.
- ◆ Passed EMC and LVD international standard CE certification.

### 3. Technical Parameters

Items	Unit	Parameter	Note
Laser Model		DFB	Oclaro (Made in USA)
Wavelength	nm	1550±10	Specified Before Ordering
Optical Modulation Method		Externally Modulated	
Optical Output Power	dBm	2x7	Can Customize 2x8, 2x9,2x10
SBS Threshold	dBm	18(Default)	13~19 Continuous adj.
Optical Connector		FC/APC or SC/AP	Specified Before Ordering
Frequency Range	MHz	47~1000	
CNR	dB	≥52.0	GY/T143-2000 6.2.3.5
Flatness	dB	±0.75	GY/T143-2000 6.2.4
RF Input Level	dBuV	78~88	AGC Automatic Control
C/CTB	dB	≥65.0	GY/T143-2000 6.2.5
C/CSO	dB	≥65.0	GY/T143-2000 6.2.6
RF Input Impedance	Ω	75	
RF Input Return Loss	dB	>16(47~550)MHz >14(550~862)MHz	GB/T11381.1 4.2.2.2.5
Power Supply	V	90~265 VAC	Optional -48VDC
Power Consumption	W	≤50	Single Power Supply Operation
Working Temperature	℃	0~50	Automatic Temperature Control
Storage Temperature	℃	-20~85	
Working Relative Humidity	%	20%~85%	
Dimension	"	19"×11"×1.75"	483(W)x280(D)x44(H)
Network Management Interface		RJ45	Supporting Web Browser and SNMP

### 3. Product model series

- FWT-1550EH -2×7 ( two outputs, ≥7dBm )
- FWT-1550EH -2×8 ( two outputs, ≥8dBm )
- FWT-1550EH -2×9 ( two outputs, ≥9dBm )
- FWT-1550EH -2×10 ( two outputs, ≥10dBm )

