

## FWT-1550ES Series Standard 1550nm External Modulation Optical Transmitter



### 1. Product Description

FWT-1550ES series is a standard and practical 1550nm external modulation optical transmitter specially developed for small and medium-sized CATV stations. This device uses narrow line width Typ. = 1MHz, low noise, continuous wave DFB laser as the light source.

Adopting the LiNbO<sub>3</sub> external modulator specially developed for CATV signal modulation, and independently developed and designed dual microwave source optimization control technology. 47 ~ 862MHz bandwidth, CNR  $\geq$  51dB, CTB  $\leq$  -65dB, CSO  $\leq$  -65dB, SBS: 13, 16, 18dBm adjustable, which can meet the high-quality transmission of video, audio and data in CATV networks. Equipped with SNMP network management, 1 + 1 power supply backup.

FWT-1550ES series standard 1550nm external modulation optical transmitter, with excellent performance-price ratio, suitable for FTTH triple play CATV from headend to end user.

### 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 $\geq$ 51dB.
- ◆ 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 adjustable: 13,16,18 dBm; AGC / MGC mode selectable at site, OMI can be adjustable, suitable for different network transmissions.
- ◆ 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.
- ◆ Excellent performance-price ratio: suitable for FTTH triple play CATV from headend to end user.
- ◆ 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.

### 3. Technical Parameters

Items	Unit	Parameter	Note
Laser Model		DFB	Oclaro Digital
Wavelength	nm	1550±10	Specified Before Ordering
Optical Modulation Method		Externally Modulated	
Optical Output Power	dBm	2x5	Can Customize 1x7, 1x8,1x9 2x5, 2x6,2x7, 2x8,2x9
SBS Threshold	dBm	16(Default)	13,16,18 adj.
Optical Connector		FC/APC or SC/AP	Specified Before Ordering
Frequency Range	MHz	47~862	
CNR	dB	≥51.0	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

### 4. Product model series

FWT-1550ES -1×7 (one output, ≥7dBm)  
 FWT-1550ES -1×8 (one output, ≥8dBm)  
 FWT-1550ES -1×9 (one output, ≥9dBm)  
 FWT-1550ES -2×5 (two outputs, ≥5dBm)  
 FWT-1550ES -2×6 (two outputs, ≥6dBm)  
 FWT-1550ES -2×7 (two outputs, ≥7dBm)

FWT-1550ES -2×8 (two outputs, ≥8dBm)

FWT-1550ES -2×9 (two outputs, ≥9dBm)



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