



# **BOTX "Z" SERIES**

## **FORWARD OPTICAL TRANSMITTER 1550nm**



**TECHNICAL SHEET**

## 1.0 PRODUCT DESCRIPTION

The Z Series is our 1550nm externally modulated optical transmitter. It adopts high efficiency modulation mode for RF carrier.

The 1550nm externally modulated technology has the benefit of no laser chirp, low dispersion distortion, and large extinction ratio, with excellent characteristic within 40~862MHz. External Modulator does not generate CSO distortion after reasonable bias. The Z series 1550Tx can be the backbone of any P2P application or FTTx network deployment.

## 2.0 Features and benefits

- The operating bandwidth is up to 45~870MHz.
- \* High performance: Externally modulated technology, no laser chirp, low dispersion distortion, high extinction ratio, with excellent characteristic within 40~862MHz.
- Narrow bandwidth (0.65MHz), lower noise, DFB continuous wave laser, is propitious to reduce the influence of the dispersion.
- $CNR \geq 53dB$  and excellent CTB, CSO index.
- SBS: 13~18dBm adjustable.
- ITU standard wavelength,  $\pm 200GHz$  ( $\pm 1.6nm$ ) adjustable.
- AGC/MGC mode is optional at spot. OMI can be optimized at spot.
- Perfect RS232 communication interface.
- Advanced SNMP network management function (option).
- 1+1 power supply backup, switch automatically.
- Casing temperature auto-control.
- Excellent P/P ratio.

### 3.0 TECHNICAL INDEX

		Index	Supplement	
<b>Specifications</b>				
Performance				
Optic feature	Operating wavelength	(nm)	1548~1563	
ITU-TG.692			HT8500HU	
Wavelength	(nm)		±1.6	
ADJ. range			(±200GHz)	
Wavelength ADJ. mode		±0.05nm	stepping	
Linewidth	(MHz)	Typ.=0.65	FWHM( $\Delta\lambda$ ) (-3dB fullwidth)	
Side mode suppression ratio	(dB)	≥45	SMSR	
Equivalent noise intensity	(dB/Hz)	≤-160	RIN (20~1000MHz)	
Output power	(dBm)	2×7	Optional 2×5, 2×6, 2×9, 2×10	
Return loss	(dB)		≥50	
Optical fiber connector		SC/APC	Optional LC/APC, FC/APC	
RF feature	Work bandwidth	(MHz)	47-862	
47~1000			HT8500H-100	
47~1080			HT8500H-108	
Input level	(dBmV)	18~28	AGC	
Flatness	(dB)	≤±0.75	47~862MHz	
≤±1.5		47~1000MHz		
Return loss	(dB)	>16	47~750MHz	
Input impedance	( $\Omega$ )		75	
RF port			F-Female	
Link feature	Transmit channel		PAL-D/60CH	PAL-D/99CH