

## 1550nm External Modulation Transmitter

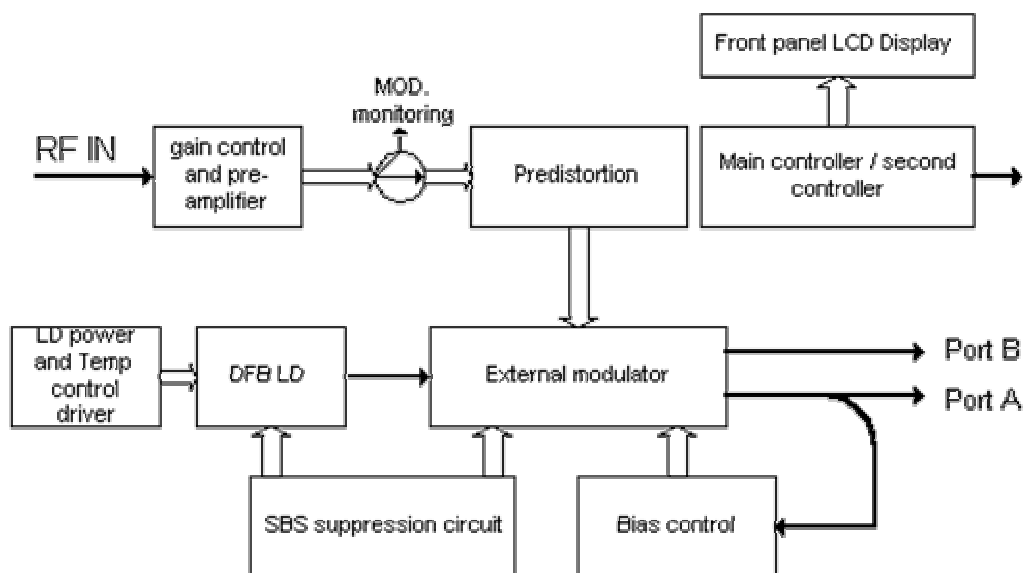


GWT3500D 1550nm external modulation transmitter delivers TV signals, Digital Video, telephony and data in long haul transmission or local dense distribution. With well-qualified optical and electronic design, GWT3500D keeps the excellent performance by using high quality devices. All materials applied in GWT3500D meet RoHS requirements.

### Features

- n 19" 1U standard rack
- n Higher Performance DFB Laser and LiNbO<sub>3</sub> External Modulator
- n Dual Optical Outputs, Each Output  $\geq 9$ dBm
- n Excellent Predistortion Circuit
- n GaAs Technology
- n SBS up to 19dBm
- n Built-in Micro-Processor Monitoring Transmitter Status
- n Front Panel LCD displays accurate working parameters
- n RS485/RS232 Network Interface
- n RoHS compatible

### Block Diagram



## Specifications

### Optical Parameter

Wavelength: 1550±5 nm or appointed ITU-T wavelength  
Laser type: cooled DFB with isolator in butterfly package  
Optical Modulation: LiNbO<sub>3</sub> external modulator  
SBS: 16.5~19 dBm adjustable  
Fiber connector: FC/APC or SC/APC  
Optical Return Loss: ≥50dB

### RF Parameters

Frequency Range: 47~ 862 MHz  
RF Input Level: 15~25 dBmV/ch  
Flatness: ±0.75 dB  
Impedance: 75Ω  
Input Return Loss: ≥16dB (47~550) MHz; ≥14dB(550~862)MHz  
AGC Range: ±5 dB  
MGC Range: ±5 dB  
Carrier to Noise: ≥53 dB  
C/CSO: ≤-65 dB    C/CTB: ≤-65 dB

Notes: The CNR and distortion are tested under 59 PAL-D channels within 550MHz and 320 MHz digital video channels, where the digital video channel level is 10dB lower than the analog TV channel. The transmitter is followed by a 17dBm EDFA. The optical signal input power to standard receiver is -1dBm after 65Km fiber and optical attenuator.

### Power Supply

Power Supply: AC 100V~240V (50/60 Hz) or -48V DC  
Power Consumption: 30 W

### Environment

Working Temperature: 0~45°C  
Storage Temperature: -20~65°C  
Humidity: 95% non-condensing

### Physical Parameters

Weight: 15Kg  
Dimension (mm): 483×381×44

### Customer Interface

Network Management: RS485/RS232

Fiber Connector: SC/APC or FC/APC

RF Connector: Metric F or American F

RF Test Port: Metric F or American F

### **Ordering Information**

GWT3500D – AB – CD- EF-G

AB: 07\_07dBm Optical Output with 16.5dBm SBS

09\_09dBm Optical Output with up to 19dBm SBS

CD: FC\_FC/APC Fiber Connector

SC\_SC/APC Fiber Connector

EF: Default \_220V AC

48\_-48V DC

G: Default\_1550±5nm wavelength

Appointed ITU-T wavelength