

GWT3500 Series 1550nm DFB Transmitter

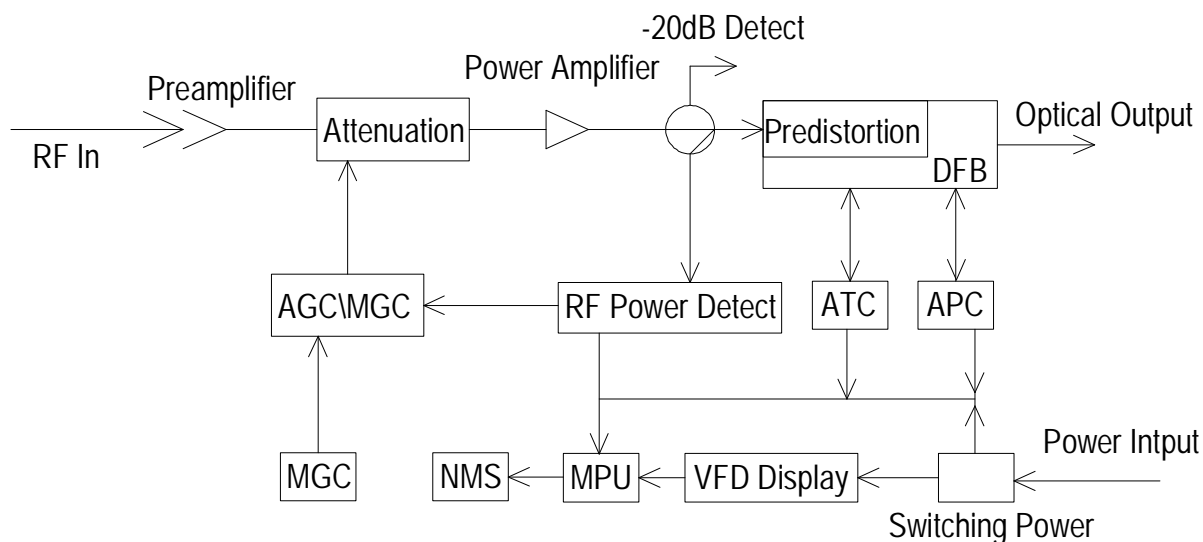


GWT3500 is a direct modulation 1550nm DFB transmitter for analog TV, digital TV and CMTS signals local fiber dense distribution and QAM TV Signal long-distance fiber transmission. The transmitter utilizes high linearity DFB laser, RF power digital automatic process technique, along with RF pre-distortion circuit developed by Greatway Technology. The built-in microprocessor monitors the transmitter working status and automatically insures the optimistic performance. GWT3500 is ideal for analog TV fiber distribution within 20Km and QAM TV signal long distance transmission within 100Km.

Features

- l Low noise high linearity Ortel-Emcore cooled DFB laser
- l GaAs Technology up to 862MHz
- l RF power digital automatic process technology control the laser driving RF power level automatically according to RF signal level and channels, ensuring the best C/N, CTB and CSO
- l Excellent pre-distortion technology improves CTB, CSO and C/N
- l Built-in microprocessor accurately monitors laser output power and temperature.
- l Front panel VFD displays the status parameters and function message
- l SNMP network management optional

Block Diagram



Specifications

Item	Unit	Parameter	
Optical Power	mW	6	10
Optical Link Path Loss	dB	9	11
Optical Wavelength	nm	1550±10	
Type of Laser		14pin cooled DFB laser in butterfly package with isolator	
Optical modulation mode		Direct Modulation	
Optical connector Type		SC/APC or FC/APC	
Frequency Range	MHz	47~862 (1000MHz Optional)	
RF Input Level	dBmV	15~25	
Flatness In Band	dB	±0.75	
RF Input Impedance	Ω	75	
Input Reflection Loss	dB	≥16 (47~862/1000)MHz	
C/CTB	dB	≥65	
C/CSO	dB	≥59	
C/N	dB	≥51	
AGC Control Range	dB	±5	
Power Voltage	V	AC 100V~240V (50/60 Hz)	
Power Consumption	W	15	
Operation Temperature	°C	0~50	
Store Temperature	°C	-40~85	
Relative Humidity	%	Max 95% no condensation	
Dimension	mm	483 (L) × 381 (W) × 44 (H)	
Weight	Kg	5	

Test condition: Input 59 channels PAL-D signal to the optical transmitter and measure the standard optical receiver C/CTB, C/CSO and C/N in conditions of -1dBm optical input (10km fiber + optical attenuator) and 36 dBmV RF output.

Ordering Information:

GWT3500-AB-CD-EF-G Forward Path Transmitter

AB: Optical output power in mW, 6 or 10

CD: Optical connector, FC_FC/APC, SC_SC/APC

EF: None for 862MHz, 1000 for 1GHz bandwidth

G: None for RS-232 interface, N for SNMP interface