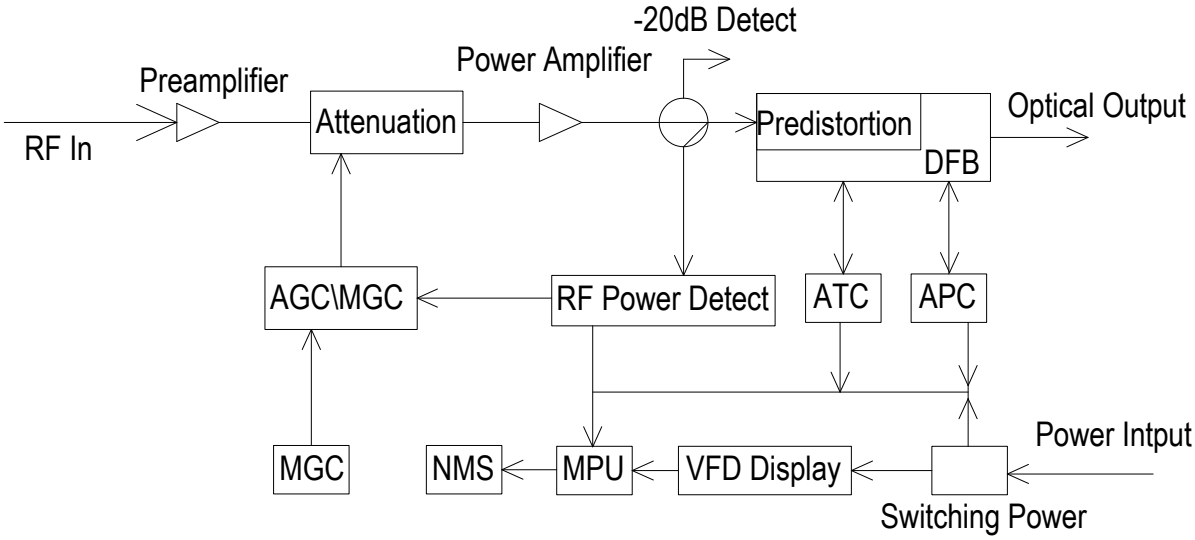
GWT3500 1550nm DFB Transmitter

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 ensures the optimistic performance. GWT3500 is ideal for analog TV fiber distribution within 20Km and QAM TV signal long distance transmission within 100Km.

Features

- Low noise high linearity Ortel-Emcore cooled DWDM DFB laser
- GaN Technology up to 1218MHz
- 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
- Excellent pre-distortion technology improves CTB, CSO and C/N
- Built-in microprocessor accurately monitors laser output power and temperature.
- Front panel VFD displays the status parameters and function message
- SNMP network management optional
- 1310nm optional

Block Diagram



Specifications

Item	Unit	Parameter
Optical Power	mW	10
Optical Link Path Loss	dB	11
DWDM Wavelength	nm	1528~1563nm ITUT Cxx channel
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	47~1000/1218
RF Input Level	dBmV	15~25
Flatness In Band	dB	±0.75
RF Input Impedance	Ω	75
Input Reflection Loss	dB	≥16
C/CTB	dB	≥65
C/CSO	dB	≥59
C/N	dB	≥51
AGC Control Range	dB	0~15
MGC Control Range	dB	0~15
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-E Forward Path 1550nm Direct Modulation Transmitter

AB: Optical output power in mW, 10mW only

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

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

Code	Frequency (THz)	Center Wavelength(nm)	Code	Frequency (THz)	Center Wavelength(nm)
C17	191.7	1563.86	C40	194.0	1545.32
C18	191.8	1563.05	C41	194.1	1544.53
C19	191.9	1562.23	C42	194.2	1543.73
C20	192.0	1561.42	C43	194.3	1542.94
C21	192.1	1560.61	C44	194.4	1542.14
C22	192.2	1559.79	C45	194.5	1541.35
C23	192.3	1558.98	C46	194.6	1540.56
C24	192.4	1558.17	C47	194.7	1539.77
C25	192.5	1557.36	C48	194.8	1538.98
C26	192.6	1556.55	C49	194.9	1538.19
C27	192.7	1555.75	C50	195.0	1537.40
C28	192.8	1554.94	C51	195.1	1536.61
C29	192.9	1554.13	C52	195.2	1535.82
C30	193.0	1553.33	C53	195.3	1535.04
C31	193.1	1552.52	C54	195.4	1534.25
C32	193.2	1551.72	C55	195.5	1533.47
C33	193.3	1550.92	C56	195.6	1532.68
C34	193.4	1550.12	C57	195.7	1531.90
C35	193.5	1549.32	C58	195.8	1531.12
C36	193.6	1548.51	C59	195.9	1530.33
C37	193.7	1547.72	C60	196.0	1529.55
C38	193.8	1546.92	C61	196.1	1528.77
C39	193.9	1546.12			