



CTV-2000-FTX SERIES

45~862MHz CATV forward path transmitter



COMPATIBLE WITH: CTV-2000-FRX

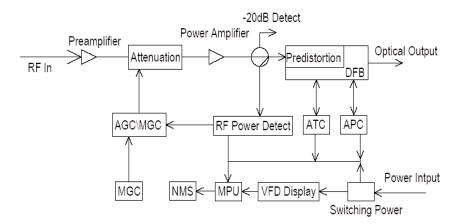
SUMMARY

CTV-2000 series 1310nm transmitter is primarily used for CATV, 110 channel video signal, digital TV signal, telephone voice signal and data signal, long-distance fiber transmission. The transmitter utilizes a high linearity DFB laser, RF power digital automatic process technique, along with RF pre-distortion circuit. The built-in microprocessor monitors the transmitters working status and automatically insures optimum performance. All materials used in CTV-2000 optical transmitter meet RoHS requirement.

- -Low noise high linearity Ortel-Emcore cooled DFB laser
- -GaAs Technology up to 1000MHz (typical 862MHz)
- -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 $\ensuremath{\text{C/N}}$
- -Built-in microprocessor accurately monitor laser output power

- and temperature.
- -Front panel VFD displays the status parameters and function message
- -19" 1U standard rack with RS485 and RS232 ports for remote monitor and control
- -SNMP network management optional
- -RoHS compatible

BLOCK DIAGRAM





SPECIFICATIONS

Unit Item **Parameter Optical Power** mW 4 6 8 10 12 14 16 18 20 Optical Link Path Loss dB 7 9 10 11 11.8 12.5 13 13.6 14 Optical Wavelength nm 1310 +/- 20 Type of Laser Cooled DFB laser 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 Ohms 75 Input Reflection Loss dB $= or > 16 (47 \sim 862/1000) MHz$ C/CTB dB = or > 67C/CSO dΒ = or > 62dΒ C/N = or > 51AGC Control Range dΒ +/- 5 MGC Control Range dB +/- 5 Power Voltage V AC 90V~265V (50/60 Hz) **Power Consumption** W **Operation Temperature** С 0~50 С Store Temperature -40~85 Relative Humidity % Max 95% no condensation Dimension 483 (L) x 381 (W) z 44 (H) mm Weight Kg

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.

ODERING INFORMATION

CTV-2000-FTX-AB-CD-EF-G Forward Path Transmitter

AB: Optical output power in mW, 04/06/08/10/12/14/16/18/20

CD: Optical connector, FC for FC/APC, SC for SC/APC

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

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

