

FEATURES

- ▷ 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 C/N
- ▷ Built-in Microprocessor Accurately Monitor Laser Output Power and Temperature.
- ▷ Front Panel VFD Displays the Status Parameters and Function Message
- ▷ 19" 1RU Standard Rack With RS485 and RS232 Ports For Remote Monitor and Control
- ▷ SNMP Network Management Optional
- ▷ RoHS Compliant

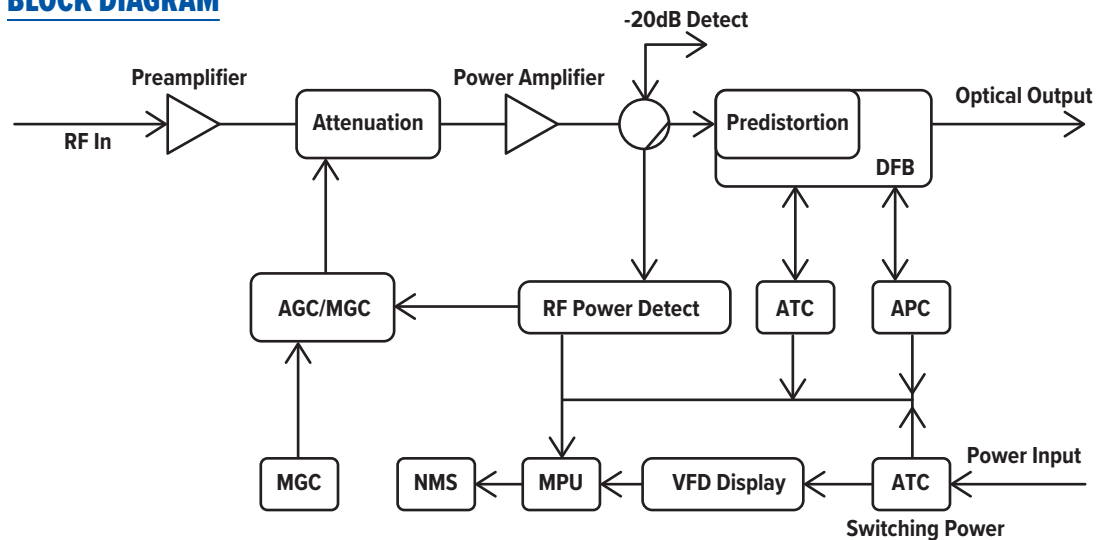
45~862MHz CATV Forward Path Transmitter & FTTH CATV Optical Receiver.



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 ensures optimum performance. All materials used in CTV-2000 optical transmitter meet RoHS requirement.

The CTV-2000 series CTV-2000-FRX Optical Receiver is designed for FTTH broadband analog or digital CATV services. Working at extremely low optical input power, CTV-2000-FTX still generates excellent CATV signals.

BLOCK DIAGRAM



REAR MODULES



TECHNICAL SPECIFICATIONS

CTV-2000-FTX

Optical Power ¹	4, 6, 8, 10, 13, 16, 20, 22, or 31 mW
Optical Link Path Loss ¹	7, 9, 10, 11, 12, 13, 14, 15, or 16 dB
Optical Wavelength	1310nm +/- 20nm
Type of Laser	Cooled DFB laser with isolator
Optical Modulation Mode	Direct Modulation
Optical Connector Type	SC/APC or FC/APC
Frequency Range	47-862 (1000MHz Optional)
RF Input Level	15-25dBmV
Flatness In Band	+/- 0.75dB
RF Input Impedance	75 Ohms
Input Reflection Loss	> 16dB (47-862/1000) MHz
C/CTB	> 67dB
C/CSO	> 62dB
C/N	> 51dB
AGC Control Range	+/- 5dB
MGC Control Range	+/- 5dB
Power Supply Voltage	AC 90V-265V (50/60 Hz)
Power Consumption	15W
Operating Temperature	0 to 50 C
Relative Humidity	95% non-condensing
Dimensions (LxWxH)	483mm x 381mm x 44mm
Weight	5Kg

CTV-2000-FRX

Input Optical Wavelength	1000 - 1600 nm
Operating Optical Power	-2 to -8 dBm
Optical Connector	SC/APC
Optical Return Loss	60 dB
Input Optical Power Test	1 V/mW
RF Bandwidth	45 - 1000 MHz
RF Connector	F Type
RF Output Impedance	75 Ohm
RF Output Level	20dBmV @ -5dBm input optical Power
RF Flatness	+/- 0.75dB
RF Return Loss	>16 dB
CNR	>48 dBc @ -5dBm input optical Power
CSO	< -70 dBc @60ch PAL-D
CTB	< -60 dBc @60ch PAL-D
Power Supply	+5 V DC Power Adapter
Power Consumption	< 1W
Operating Temperature	-40 to +60 C
Dimensions (L x W x H)	87.8mm x 71mm x 25.1mm
Weight	0.13 Kg (not including power adapter)

Note 1: Optical Power and Link Loss correspond to the particular Model ordered, see Ordering Information below.

ORDERING INFORMATION

Part #	Description
CTV-2000-FTX-04-SCA	45~862MHz CATV Forward Path Optical Transmitter, 6dBm/4mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-06-SCA	45~862MHz CATV Forward Path Optical Transmitter, 7.5dBm/6mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-08-SCA	45~862MHz CATV Forward Path Optical Transmitter, 9dBm/8mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-10-SCA	45~862MHz CATV Forward Path Optical Transmitter, 10dBm/10mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-13-SCA	45~862MHz CATV Forward Path Optical Transmitter, 11dBm/13mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-16-SCA	45~862MHz CATV Forward Path Optical Transmitter, 12dBm/16mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-20-SCA	45~862MHz CATV Forward Path Optical Transmitter, 13dBm/20mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-22-SCA	45~862MHz CATV Forward Path Optical Transmitter, 14dBm/22mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FTX-31-SCA	45~862MHz CATV Forward Path Optical Transmitter, 15dBm/31mW, 1 RU. Single-mode fiber only, with SC/APC Angle Polished Connector
CTV-2000-FRX-SCA-ATT07	FTTx CATV Forward Path Optical Receiver, 870MHz, Optical Range -3 to -8 dBm, -5 dBm Ideal, Power Supply Included. SC/APC Angle Polished Connector. Includes the ATT-2000-07 Optical Attenuator: 2 - 7 dB Variable Steps (Requires 15-25dBmV RF input Level, 20dBmV ideal performance)