1RU 1310nm Direct MOD Forward Transmitter

AT5000 Series

- High Performance DFB Laser
- 1310 nm TX in 1RU Chassis
- Bandwidth 47 MHz to 1218 MHz
- AGC/MGC
- Universal single input
- RF test point
- Redundant AC/DC power
- Intuitive front panel LCD display
- Universal management through Web interface

AT5000 1RU 1310 Forward Transmitter offers a flexible, 1RU, high performance platform for high quality forward path CATV video and data services distribution, especially for the sub Headend and Hubs in a CATV networks. Together with ACT 1RU AT5000 ARQR return receiver provides an ideal standalone MDU solution in traditional HFC network and also high density FTTX networks to bring back the data signal from business and subscriber home premises.

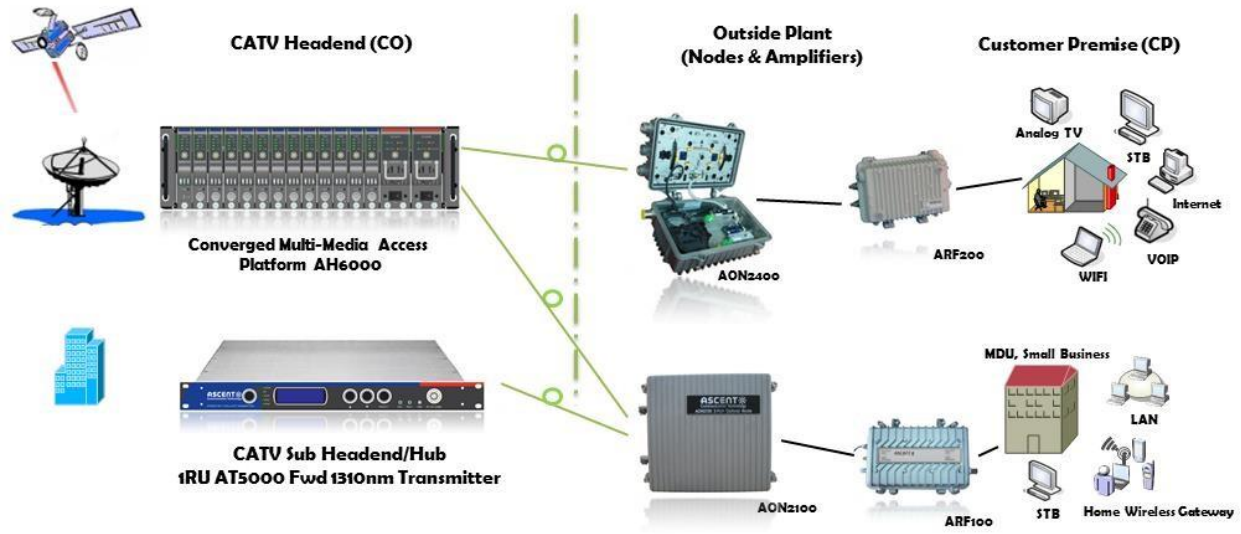
AT5000 1RU 1310 Direct Mod forward transmitter is designed with a high performance 1310nm DFB laser transmitter module and ideal for both broadcast and narrowcast application in one pizza box platform. AT5000 F3CT can provide a wide range of optical output power to deliver both analog and digital signals. Advanced pre-distortion circuitry achieves superior CSO and CTB performance. Good link performance enables DOCSIS 3.0 downstream bonding on HFC architectures.

AT5000 F3CT forward transmitter is equipped with intuitive front panel LCD display to make operator's life easier. The optical transmitter is packaged in a self-contained 19" sub-rack of 1 RU with universal mains power supply and SNMP management.

Key Features

- High performance distributed feedback (DFB) laser with pre-distortion circuit
- Suitable for CTAV sub Headend or hub standalone application
- Bandwidth 47 to 1218MHz
- Automatic/manual gain control (AGC/MGC)
- Single input for both broadband and narrowband signal
- RF input test point
- Short circuit protection
- Dual redundant hot-swappable AC or DC power supplies
- Front-panel LCD for local monitoring of transmitter status
- Local or remote monitoring and configuration
- SNMP/HTTP monitoring, management and control.

Application Diagram



Specifications

AT5000 Direct Mod 1310 nm Single Forward Transmitter, F3CT

Items	Unit	Index Min.	Typ.	Max.	Remarks
Operating Wavelength Range	nm	1300	1310	1320	
No. of Output Ports			1		
Output Power per Port	dBm	2		36	2mW interval
Optical Return Loss	dB	50			
Fiber Connector		SC/APC			FC/APC、LC/APC
Operating Bandwidth	MHz	47		1218	
Input Level	dBμV	75	80	85	AGC
Flatness	dB	-0.75		+0.75	47 to 1002MHz
		-1.0		+1.0	1002 to 1218MHz
Return Loss	dB	16			47 to 1218MHz
Input Impedance	Ω		75		
RF connector		F Metric/Imperial			Specified by user
No. of Test Channels		PAL-D/59CH(NTSC/80CH)			
CNR	dB	51.0			Tx to Rx Rx -1dBm
CTB	dB	65.0			
CSO	dB	60.0			
Network Management Interface		SNMP,WEB supported			
Power Supply	V	90		265	AC
		-72		-36	DC
Power Consumption	W			20	Dual Power Supply, 1+1 standby
Operating Temp	℃	-5		+65	Auto case temp control
Storage Temp	℃	-40		+85	
Operating Relative Humidity	%	5		95	
Dimension	mm	370×483×44			D、W、H
Weight	Kg	4.1			

Ordering Information

AT5000 F3CT Series	Description
AT-51-F3CT-DM-08-SC-AC2	AT5000 1310nm F3CT Direct Mod TX 1RU, 8dBm output, 1218MHz, SC/APC, Dual AC Power
AT-51-F3CT-DM-10-SC-AC2	AT5000 1310nm F3CT Direct Mod TX 1RU, 10dBm output, 1218MHZ, SC/APC, Dual AC Power
AT-51-F3CT-DM-12-SC-AC2	AT5000 1310nm F3CT Direct Mod TX 1RU, 12dBm output, 1218MHz, SC/APC, Dual AC Power
AT-51-F3CT-DM-13-SC-AC2	AT5000 1310nm F3CT Direct Mod TX 1RU, 13dBm output, 1218MHz, SC/APC, Dual AC Power
AT-51-F3CT-DM-14-SC-AC2	AT5000 1310nm F3CT Direct Mod TX 1RU, 14dBm output, 1218MHz, SC/APC, Dual AC Power
AT-51-F3CT-DM-15-SC-AC2	AT5000 1310nm F3CT Direct Mod TX 1RU, 15dBm output, 1218MHz, SC/APC, Dual AC Power

Contact Information

Ascent Communication Technology Ltd

AUSTRALIA
140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

CHINA
Unit 1933, 600 Luban Road
200023, Shanghai, CHINA
Phone: +86-21-60232616

EUROPE
Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

Hong Kong SAR
Unit 9, 12th Floor, Wing Tuck Commercial Centre
177 Wing Lok Street, Sheung Wan, Hong Kong SAR
Phone: +852-2851 4722

USA
2710 Thomes Ave
Cheyenne, WY 82001, USA
Phone: + 1 203 350 9822

VIETNAM
11th Floor, Hoa Binh Office Tower
106 Hoang Quoc Viet Street, Nghia Do Ward
Cau Giay District, Hanoi 10649, VIETNAM
Phone: +84-24-37955917

WEB: www.ascentcomtec.com

EMAIL: sales@ascentcomtec.com

Specifications and product availability are subject to change without notice.

Ver. ACT_1RU_AT51-F3CT_Datasheet_V1i_Aug_2019