

FEATURES

- 46–1218 MHz RF bandwidth
- Full spectrum transmitter available in 16 ITU DWDM wavelengths
- All QAM/OFDM loading or up to 79 NTSC channels plus 111 QAM/OFDM channels
- Designed for long distance, multi-wavelength applications
- Broadcast and Narrowcast RF input ports internally combined
- Manual or AGC RF level control up to 6 dB
- Occupies only one full depth slot
- Front panel RF input -20 dB test point
- LED status indicators
- Front panel Laser ON/OFF key switch with indicator
- Hot plug-in/out
- Local and remote status monitoring and management features

The CommScope AT3572H C-band externally modulated analog transmitters support 1,218 MHz bandwidth operation for DOCSIS® applications. These models provide High Performance for Extended Reach for enhanced HFC, RFoG, PON, and FTTH applications.

Dual RF input ports allow combining of separate broadcast and narrowcast inputs within the transmitter to simplify deployment in the headend. AGC circuitry compensates for variations in the RF input level to the transmitter to maintain a constant RF drive level to the laser.

The characteristics of the transmitter's optical source allow high carrier-to-noise ratio (CNR) while the proprietary pre-distortion circuit provides excellent CSO, CTB, BER, and MER performance. AT3572H series transmitters are digital ready for full load with 100% QAM/OFDM signals.

The compact design minimizes rack space requirements and permits plugging the one-slot-wide, full-depth transmitter module in either the front or rear of a CH3000 3-rack unit size chassis to optimize equipment installation and operating conditions. This family of transmitters is part of the full complement of products developed by CommScope to support and enhance the deployment of HFC networks.

Sixteen (16) wavelength options are available on the DWDM ITU grid (ITU-T G.694.1).



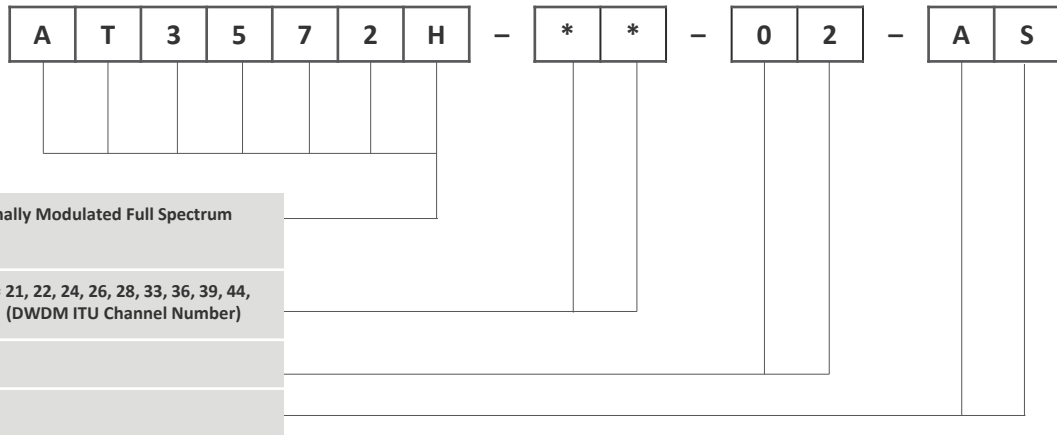
SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	13.0" D x 4.3" H x 1.0" W (3RU) (33 cm x 11 cm x 2.5 cm)
Weight	1.8 lbs (0.82 kg)
Environmental	
Operating Temperature Range	0° to +50°C (32° to 122°F)
Storage Temperature Range	-40° to +85°C (-40° to +185°F)
Humidity	5% to 95% non-condensing
RF and Optical Interface	
Wavelength	Available in 16 channels on DWDM ITU Grid (ITU-T G.694.1)
Optical Connector	SC/APC located on BP-A6 back plate
RF Input	F-type female connectors located on BP-A6 back plate)
RF Test Point	G-type male connector located on front panel (-20 dB)
Power Requirements	
Input Voltage	12 V _{DC} nom. from chassis resident power supply
Power Consumption	10 W
General	
Channel Plans	Up to 79-channels NTSC channel loading plus QAM/OFDM channels up to 1218 MHz, or all QAM/OFDM loading
Optical Output Power	12.5 dBm
RF Gain Control	Manual or Automatic Gain Control (AGC)
Electrical	
Passband	46 to 1218 MHz
Frequency Response (Flatness including Slope)	± 1 dB
AGC Range	± 3 dB
Manual Gain Control Range	0 to -6.0 dB
Input Return Loss, minimum	18 dB
Level Stability	± 1 dB
Nominal RF Input Levels (dBmV/ch)	79 NTSC channels from 54 to 550 MHz BC RF input: 16 dBmV in AGC Mode, 13 dBmV in Manual Mode 111 QAM channels from 550 to 1218 MHz NC RF input: 16 dBmV in AGC Mode, 10 dBmV in Manual Mode <i>NOTE: NC QAM signals are attenuated 6 dB before internal combining with BC analog signals</i> 190 QAM or equivalent OFDM channels from 54 to 1218 MHz: 13.5 dBmV in AGC Mode, 10.5 dBmV in Manual Mode
Fiber-only Link Performance¹	
190 QAM/OFDM 70 km Single Wavelength	MER: 42 dB BER: 1 ⁻⁹ , pre-FEC, ITU Annex B
79 NTSC + 111 QAM/OFDM 50 km Single Wavelength	Carrier-to-noise Ratio (CNR) ² In band (54–550 MHz): 51 dB Composite Second Order (CSO) ³ In band (54–550 MHz): 60 dB Composite Triple Beat (CTB) ³ In band (54–550 MHz): 62 dB MER: 39 dB BER: 1 ⁻⁹ , pre-FEC, ITU Annex B
Status Indicators, Alarms and Monitoring	
	Front panel LEDs (Laser On/Off and Alarms)
	Local and remote status monitoring via CommScope Opti-Trace [®] applications
	Firmware download capability by local serial port
	For more information about full spectrum multiwavelength and extended reach applications with up to 16 DWDM wavelengths, please contact your CommScope representative.

NOTES:

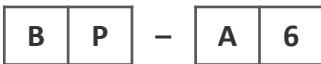
- SBS threshold 11.5 dBm for 70 km fiber.
- Measured with 79 NTSC channels from 54 to 550 MHz and 111 256-QAM channels from 550 to 1218 MHz. 50 km fiber link with 0 dBm receiver optical input power.
- Measured with un-modulated carriers of equal power at the input of the transmitter.

ORDERING INFORMATION



Module Back Plates

AT3572H series transmitters utilize BP-A6 back plates, which must be ordered separately. This single-slot width back plate provides connections for a single transmitter and may be ordered as:



RELATED PRODUCTS

CH3000 Chassis	FA3500 Series Optical Amplifiers
Optical Transmitters	Optical Passives
BP Back Plates	Installation Services

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656



Note: Specifications are subject to change without notice.

Copyright Statement: © 2022 CommScope, Inc. All rights reserved. ARRIS, the ARRIS logo, and Opti-Trace are trademarks of CommScope, Inc. and/or its affiliates. All other trademarks are the property of their respective owners. No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from CommScope, Inc and/or its affiliates ("CommScope"). CommScope reserves the right to revise or change this content from time to time without obligation on the part of CommScope to provide notification of such revision or change.

1511750-RevB_AT3572H_1.218GHz_AnalogTransmitter