

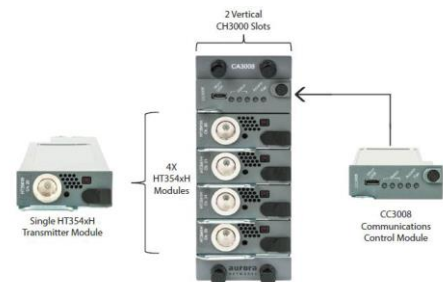
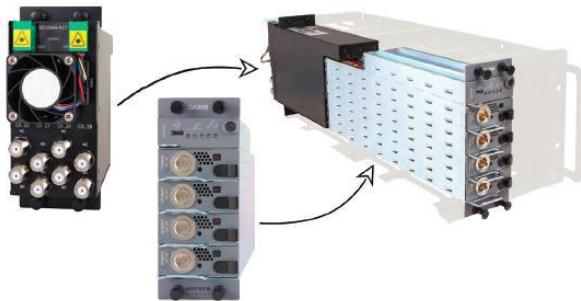
COMMSCOPE HT3300H Series

DOUBLE-DENSITY 1310 NM TRANSMITTER SYSTEM

The COMMSCOPE HT3300H Series Double-Density 1310 nm Transmitter System provides high performance and a high rack density forward path transmission solution for Cable TV service providers.



- Link loss budgets available from +3 to +15 dB
- High rack density: 24 transmitters per 3RU chassis, with redundant power supplies
- 45 -1218 MHz RF bandwidth
- Dual RF inputs for BC and NC
- Optional Automatic Gain Control (AGC)
- Low power consumption
- Hot plug in/out, individually replaceable transmitter modules
- Front access -20 dB input test point
- Front panel laser On/Off switch
- Local and remote status monitoring features



The high density packaging design allows up to four (4) HT3300H series 1.2 GHz transmitters plus a CC3008 Communications Control Module to be stacked vertically and contained by the CA3008 module carrier, requiring only two chassis slots of a 3RU chassis. The compact solution supports up to 24 transmitters in a CH3000 chassis, including redundant power supplies.

SPECIFICATIONS

PHYSICAL			ENVIRONMENTAL	
Dimensions	11.5" D x 0.8" H x 2.0" W (29.2 x 2.0 x 5.1 cm)*		Operating	0°to +50°C (32°to 122°F)
Weight	0.75 lbs (0.34 kg)		Storage	−40° to +85°C (−40° to 185°F)
* Four (4) transmitter units designed to be vertically stacked, plus a CC3008 Communications Module, and installed inside a CA3008 Module Carrier. The combination occupies two slots in a 3RU CH3000 Chassis.			Humidity	5% to 95% non-condensing
RF AND OPTICAL INTERFACE			OPTICAL	
RF input	F-type male (mates to BD31A4 Back Plates)		Optical output power	10 ±0.25 dBm
			Wavelength	See DWDM ITU Channel Plans description
Input RF test point	G-type male (located at front panel, −20 dB)		Fiber length (user-settable, adjustable dispersion compensation)	HT3541H: 60 km (in 5 km steps) HT3542H: 40 km (in 1 km steps)
Optical connector	SC/APC (mates to BD31A4 Back Plates)		Additional external dispersion compensation can be supported for some applications.	
POWER REQUIREMENTS			GENERAL	
Input voltage	12 VDC		Wavelength	1310 ±10 nm
Power consumption	10 W (per transmitter) including controller and back plate cooling fan		Hot plug-In/Out	
			Manual gain alignment and AGC	
ELECTRICAL			ELECTRICAL	
Pass band	45–1218 MHz		Manual gain control range	0 to −6 dB minimum
Frequency response (including slope)	±1.0 dB (BC input @ 25°C) −6 ±1.0 dB (NC input relative to BC input)		Manual gain control step	0.5 dB
			RF input impedance	75 Ω, nom
			RF input return loss	18 dB, min
NOMINAL RF INPUT LEVELS (INPUT ATTENUATOR = 0 DB)			Level stability (typical)	±0.5 dB (−1 worst case relative to 25°C)
	Mode		256-QAM BER	< 10−5(pre-FEC, ITU-C)
	AGC	Manual	MER	> 37 dB to 50°C; > 36 dB to 65°C
NTSC 54-552 MHz	15	15	Fiber-only link performance ¹ (with full channel loading of 54–552 MHz analog and 552–1002 MHz QAM)	•CNR ² : 52 dB •CSO: 65 dB •CTB: 70 dB •XMOD: 60 dB
QAM 552-1002 MHz	15	15		¹ Guaranteed over full operating temperature range ² 1 dB less for transmitters with 13, 14, or 15 dBm output power. CNR measurements with 4 MHz noise bandwidth for NTSC channels.
(Level of QAM signals through NC RF input becomes 6 dB less after internal combiner. With AGC enabled, capture range is ±3 dB.)				
OPTICAL FIBER LOSS AND PERFORMANCE				
Link Loss (dB)			Output Power (dBm)	Fiber Loss (min)(dB)
3			2.75 -3.75	2.5
6			5.75 -6.75	5.5
9			8.75 -9.75	8.5
10			9.75 -10.75	9.5
11			10.75 -11.75	10.5
12			11.75 -12.75	11.5
13			12.75 -13.75	11.5
14			13.75 -14.75	11.5
15			14.75 -15.75	11.5

COMMSCOPE BD31A4 Double-Density Back Plates

DOUBLE-DENSITY BACK PLATE

The BD31A4 is a double-density back plate that provides a choice of 4 separate BC and 4 separate NC RF inputs, or 1 common BC and 4 separate NC RF inputs, for four HT3300H series transmitters.

The BD31A4 provides RF input and optical connections to or from the HT3300H transmitters.

BD31A4-100-H12F-0-AS is a double density back plate that provides 4 separate BC inputs and 4 separate NC RF inputs for four HT3300H transmitters. Also supports four separate optical output SC/APC connectors.

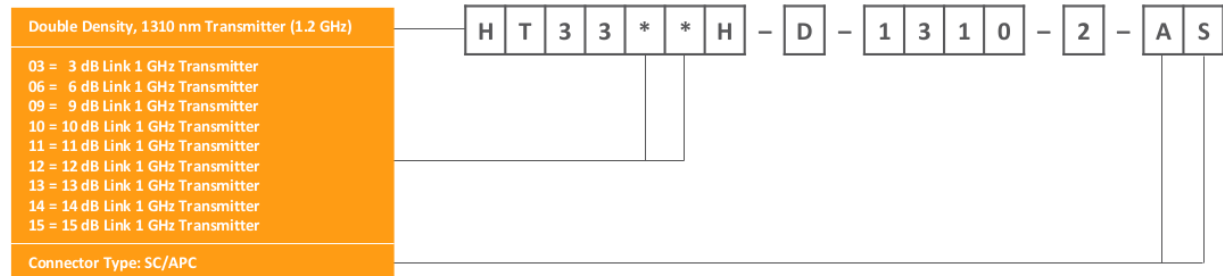
BD31A4-100-H10F-0-AS is a double density back plate that provides 1 common BC input and 4 separate NC RF inputs for four HT3300H series transmitters. Also supports four separate optical output SC/APC connectors.



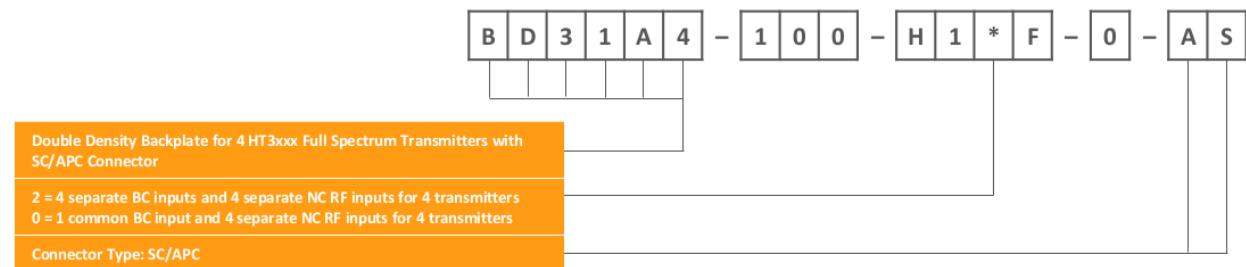
SPECIFICATIONS

PHYSICAL	
Dimensions	7.2" D x 5.2" H x 2.0" W (18.2 x 13.2 x 5.1 cm)
Weight	2.0 lb (0.91 kg)
ENVIRONMENTAL	
Operating temperature	-20° to +65°C (-4° to 149°F)
Storage temperature	-40° to +85°C (-40° to 185°F)
Humidity	5% to 95% non-condensing
POWER REQUIREMENTS	
Input voltage	12 VDC
Power consumption	5 W max (2.5 W Typ), including the replaceable cooling fan
OPTICAL	
Through 4 SC/APC connectors, the BD31A4-100 provides optical pass-through from the HT354xH transmitter.	
Optical Insertion Loss	0.2 dB Typ; 0.4 dB Max Refer to the HT3300H product specifications for more information.
RF INTERFACE	
Through 8 (eight) F-type RF connectors, the BD31A4-100 provides RF pass-through to the HT3300H transmitter:	4 BC and 4 NC (1 BC/NC pair per transmitter)

ORDERING INFORMATION



Back Plates



System Accessories

