

Features

- Link loss budgets available from +2 to +15 dB
- 46–1002 MHz RF bandwidth
- Enables very high rack density (14 transmitters per 3RU chassis)
- Occupies only one full-depth slot
- +15 dBmV/channel RF input drive level
- Superior flatness, ± 0.6 dB
- Front access –20 dB input test point
- Front panel laser On/Off interlock switch
- True dynamic Plug and Play
- Open standard TCP/IP SNMP support
- Local and remote status monitoring features
- Local and remote RF level control and alarm level settings

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Analog 1310nm Transmitter (Enhanced Performance 1 GHz Models)



The Aurora AT3300G series 1 GHz 1310 nm Enhanced Performance Transmitters provide increased bandwidth capacity for the expanding service demands of HDTV, VoIP, VOD and high speed DOCSIS. These transmitters are ideal for broadcast and narrowcast applications for optical transport with link losses ranging from 2 to 15 dB.

High density packaging enables network operators to install up to 14 transmitters per 3RU chassis, all of which can be monitored remotely or locally from the power supply module. Additionally, the compact single-width module design can be plugged in either the front or rear of the CH3000 3RU chassis to optimize equipment installation and operating conditions.

The compact design minimizes rack space requirements in headends or hubs and enhances deployment of traditional HFC, passive HFC and fiber to the home (FTTH) networks.

AT3300G-E-1

Product Specifications

Physical:

- Dimensions: 13.0" D x 4.3" H x 1.0" W (3RU)
(33 cm x 11 cm x 2.5 cm)
- Weight: 1.7 lbs (0.77 kg)

Environmental:

- Operating temperature range: -20° to +65°C
(-4° to 149°F)
- Storage temperature range: -40° to +85°C
(-40° to 185°F)
- Humidity: 5% to 95% non-condensing

Power Requirements:

- Input voltage: 12 V_{DC}
- Power consumption: 15 W

General:

- Wavelength: 1310 nm ± 10 nm
- Hot plug-in/out
- Manual gain alignment

RF and Optical Interface:

- RF input(s): F-type (at Back Plate BP-A1)
- Input RF test point: G-type (at front panel, -20 dB)
- Optical connector: SC/APC (at Back Plate BP-A1)

Electrical:

- Pass band: 46–1002 MHz
- 79 NTSC analog channel loading: 46–552 MHz
- 450 MHz QAM channel loading: 552–1002 MHz
(6 dB below analog channels)
- Frequency response (including slope): ±0.6 dB
- Nominal RF input levels (dBmV/ch):
NTSC 50–552 MHz: 15
QAM 552–1002 MHz: 9
- Manual gain control range: -6 to 0 dB
(relative to nominal level)
- Manual gain control step: 0.5 dB
- Input impedance: 75 Ω
- Input return loss, minimum (all RF inputs):
18 dB (46–550 MHz)
16 dB (550–1002 MHz)
- Level stability: ±1 dB (over operating temperature range)

- Fiber-only link performance¹ (with full channel loading of 54–552 MHz analog and 552–1002 MHz QAM):

- CNR²: 53 dB (models with 2 to 11 dBm output power)
52 dB (models with 12 to 15 dBm output power)
- CSO: 65 dB
- CTB: 70 dB
- XMOD: 65 dB

¹ Guaranteed over full operating temperature range

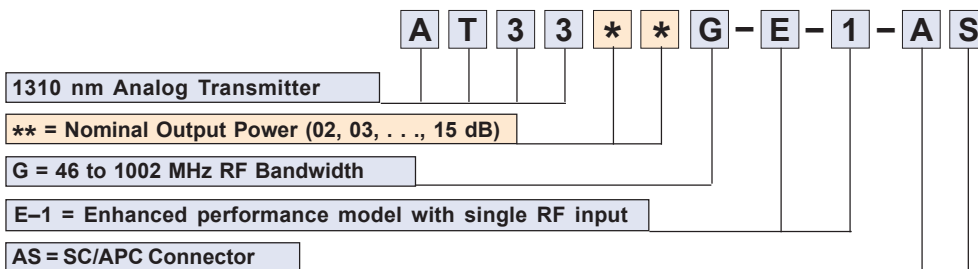
² CNR measurements with 4 MHz noise bandwidth for NTSC channels.

- 256 QAM BER (ITU-C pre-FEC): 1.0x10⁻⁵

Optical Fiber Loss and Performance:

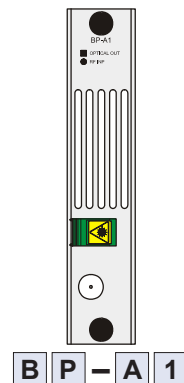
Link Loss (dB)	Output Power (dBm)	Fiber Loss (min) (dB)
2	1.75 – 2.75	1.5
3	2.75 – 3.75	2.5
4	3.75 – 4.75	3.5
5	4.75 – 5.75	4.5
6	5.75 – 6.75	5.5
7	6.75 – 7.75	6.5
8	7.75 – 8.75	7.5
9	8.75 – 9.75	8.5
10	9.75 – 10.75	9.0
11	10.75 – 11.75	9.0
12	11.75 – 12.75	9.0
13	12.75 – 13.75	9.0
14	13.75 – 14.75	9.0
15	14.75 – 15.75	9.0

Ordering Information



Required Module Back Plate

Back plates are included with ordered modules.



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