

LightHouse Series

BTEA-CO-Bxx-n16

1RU 1550nm EDFA's for FTTH Applications

The Blonder Tongue BTEA-CO-Bxx-n16 comes in 1, 2, or 4 output 1550nm Erbium Doped Fiber Amplifier and is a 1RU rack mount EDFA package containing up to four (4) identical 16dBm optical outputs. It is engineered to meet the requirements for a high-density solution for the large-scale distribution of broadband CATV video and data signals to video overlay receivers in a FTTH/FTTP PON system.

This rugged, low-profile, high-efficiency EDFA design utilizes powerful and reliable pump amplifiers in a two-stage design with interstage isolators. The unit's wide optical input range accepts a single optical input (0dBm to +6dBm) and provides a total composite/saturated output power of up to 200mW/23dBm (4 output model). As a matter of convenience and safety, this high output is further limited by dividing the unit's power into individual optical output ports via an internal low loss coupler, which ultimately provides 1, 2, or 4 optical output ports of +16dBm/40mW each.

The BTEA-CO-Bxx-n16 1, 2, or 4 output Erbium Doped Fiber Amplifier is part of Blonder Tongue's LightHouse Series of FTTH products.

- 1, 2 And 4 Output Models With +16dbm/40mw Per Port
- Specifically For Distribution Of 1550nm Video/data In Pon/aon Or Ftth Systems
- Direct Input From A 1550nm Transmitter
- Low Optical Input Level Requirements With Excellent Low Noise Performance
- Double-pump For Reliability



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○ Features & Benefits

- 1, 2 and 4 output models with +16dBm/40mW per port
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○ Specifications

OPTICAL PARAMETERS

- Wavelength 1530 nm to 1560 nm
- Gain flatness for CWDM/DWDM < +/- 0.5 dB
- Noise Figure 5.0 dB (typical); 5.5 dB (typical) @ 6dBm Input
- Isolation > 30 dB
- Optical Input Range 0 dBm to +6 dBm
- Per Port Optical Output Power: 40 mW / 16 dBm (1, 2 or 4 ports, as applicable)

ELECTRICAL, ENVIRONMENTAL & MECHANICAL PARAMETERS

- Dimensions: 1.75" H x 19.0" W x 9.0" D
- Weight: 12.1 lb. (5.5 kg)
- Operating Temperature Range: 0 to +50 degrees C (+32 to +122 degreesF)
(Air temperature measured at air inlet of Model BTEA-x EDFA)
- Humidity Range: to 90% non-condensing.
(Recommended for use only in non-condensing environments)
- AC Input Range: 100-240 VAC (@ 47-63 Hz)

EDFA INTERFACES

- Optical Connectors: SC/APC standard
- LED Indicators (Green/Red) Alarms: Pump Temperature; Pump Bias Current Input Power; Output Power
- Pump Enable/Disable Key Switch
(key not removable in "on" position)

○ Ordering Information

Model	Stock No.	Description
BTEA-CO-B16-116	7466-1	EDFA; (1x) 16dBm/40mW; 100-240VAC
BTEA-CO-B19-216	7466-2	EDFA; (2x) 16dBm/40mW; 100-240VAC
BTEA-CO-B23-416	7466-4	EDFA; (4x) 16dBm/40mW; 100-240VAC