

# Erbium Doped Fiber Amplifiers

## Trailblazer Series - BTEA



### ○ Features & Benefits

- +16 and +19 dBm, 1, 2, and 4 Output Models
- Specifically for Distribution of 1550 nm Video/Data in FTTH and HFC Systems
- Direct Input From a 1550 nm Transmitter
- Low Optical Input Level Requirements with Excellent Low Noise Performance
- Double-Pump for Reliability
- SNMP Network Management

The BTEA Series are 1550 nm Erbium Doped Fiber Amplifiers (EDFA) engineered to meet the requirements for distribution of CATV video and data signals in FTTH/FTTP and HFC systems. Models are available with 1, 2 or 4 outputs with either 16 dBm or 19 dBm optical output per port.

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 and provides a total composite/saturated output power of up to 400 mW/26 dBm (19 dBm, 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 +16 dBm or +19 dBm depending upon model.

### ○ Specifications

#### Optical Parameters

- Wavelength: 1540 to 1560 nm
- Gain Flatness for CWDM/DWDM:  $< \pm 0.5$  dB
- Noise Figure 5.0 dB
- Isolation  $> 30$  dB
- Optical Input Range: -2 dBm to +10 dBm
- Per Port Optical Output Power:  
40 mW / 16 dBm  
(1, 2 or 4 ports, as applicable)

#### EDFA Interfaces

- Optical Connectors: SC/APC standard
- LED Indicators (Green/Red) Alarms:  
Power, Pump, Status, Input Power,  
Output Power, Over Temp, Remote
- Pump Enable/Disable Key Switch

#### Mechanical

- Dimensions (H x W x D):  
1.75 x 19.0 x 10.25 in.  
44.5 x 483 x 260 mm
- Weight: 11 lb., 5 kg

#### Environmental

- Operating Temperature Range:  
0 to +50 °C, +32 to +122 °F

#### Electrical

- AC Input Range: 85-240 VAC (@ 47-63 Hz)

Please refer to the Product Instruction Manual for more specifications.

### ○ Ordering Information

Model	Stock No.	Description
BTEA-CO-B16-116-SA	7466 1	EDFA; 1550 nm, (1x) +16 dBm Outputs
BTEA-CO-B19-119-SA	7481 1	EDFA; 1550 nm, (1x) +19 dBm Outputs
BTEA-CO-B19-216-SA	7466 2	EDFA; 1550 nm, (2x) +16 dBm Outputs
BTEA-CO-B23-219-SA	7481 2	EDFA; 1550 nm, (2x) +19 dBm Outputs
BTEA-CO-B23-416-SA	7466 4	EDFA; 1550 nm, (4x) +16 dBm Outputs
BTEA-CO-B26-419-SA	7481 4	EDFA; 1550 nm, (4x) +19 dBm Outputs