

### EDFA-C-R



#### **DEVICE**

### Erbium-Doped Fiber Amplifier, C-Band

OVFRVIFW

The Optilab EDFA-C-R Erbium-Doped Fiber Amplifier (EDFA) is a high-gain, versatile amplifier designed for CATV networks, optical communication and other general-purpose optical applications. By using a dual stage amplifier design, EDFA-C-R provides optical gain of up to 30 dB, while maintaining low noise figure (NF) below 5 dB. The EDFA-C-R amplifier produces optical output levels from +18 dBm to +26 dBm with an input power level range from -12 dBm to +7 dBm. Featuring adjustable output level power via ACC through the front panel and software control through USB, this compact 1U-housing can provided up to 32 output ports. Contact Optilab for more information.

#### **FEATURES**

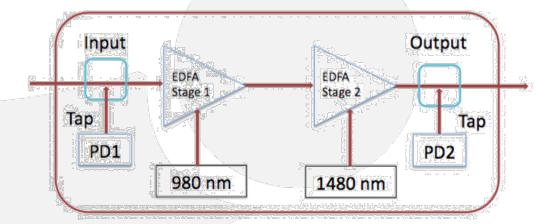
- Up to +26 dBm output power
- Dual stage pump design
- Optical gain up to 30 dB
- Software control through USB
- Up to 32 output ports

- Reliable 980 nm and 1480 nm lasers
- Input power level range: -12 dBm to +7 dBm
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators

#### **USE IN**

- Optical Communication
- Test and measurement
- CATV Network Amplification
- General-purpose optical amplifier

#### **FUNCTIONAL DIAGRAM**







# EDFA-C-R

**SPECIFICATIONS** 

**OPTICAL** 

| Operating Range                | 1528 nm – 1564 nm                 |
|--------------------------------|-----------------------------------|
| Output Power Levels            | +18 dBm to +26 dBm                |
| Input Power Range              | -12 dBm to +7 dBm                 |
| Optical Gain                   | Up to 3Ò dB @ -5 dBm input        |
| Noise Figure (NF)              | < 5.0 dB typ. @ -10 dBm input     |
| Number of Outputs              | 1 output standard, up to 32 ports |
| Optical Return Loss            | 50 dB min.                        |
| Input/Output Optical Isolation | 30 dB min.                        |
| Polarization Mode Dispersion   | 1.0 ps max.                       |
| Polarization Dependent Gain    | 0.10 dB max.                      |
| Output Power Stability         | 0.10 dB over 8 hours              |
| Input/Output Fiber Type        | Carning SMF-28                    |
|                                |                                   |

MECHANICAL

| Operating Temperature     | -10°C to +60°C                               |
|---------------------------|--|
| Storage Temperature       | -40°C to +70°C                               |
| Power Supply Requirements | 80 - 240 V, 43 - 63 Hz AC                    |
| Power Consumption         | GD W max.                                    |
| Output Level Control      | Pump Lasers Current Adjustment               |
| Monitoring                | Pump Laser Temperature                       |
| Computer Interface        | LabVIEW via USB                              |
| Display                   | Input/Output Power Level, TEC Temperature    |
| Alarms                    | Temperature and Input Power                  |
| Optical Connectors        | FC/APC, SC/APC, Other Types Optional         |
| Housing Dimensions        | IRU 482.60 (L) x 470.57 (W) x 44.00 (H) (mm) |
|                           |  |

**ORDERING OPTIONS** 

EDFA-C-xx-R-yy

xx Output Power Level: +18 dBm to +26 dBm

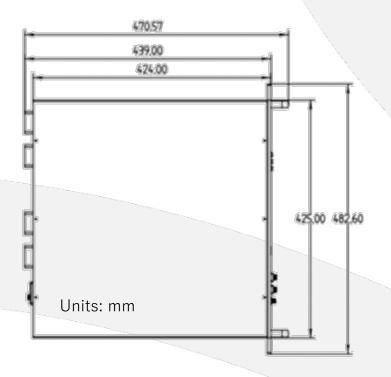
yy 1, 2, 4, 8, 16, 32





## • EDFA-C-R

#### MECHANICAL DRAWING



OPTIONAL 32 OUTPUT PORT, REAR PANEL



