



# C-BAND EDFA, POLARIZATION-MAINTAINING up to 2 W Output Power



## **Polarization-Maintaining C-Band EDFA**

- o Output Power: 2 W (33 dBm)
- o Part Number: AMN-EDFA-PM-C-2W
- o Input Power: -6 dBm to 3 dBm
- o Full C-Band Range 1529 nm - 1565 nm
- o < 6.0 dB Noise Figure
- o Available Models: 27 dBm, 30 dBm, 33 dBm



## FULL C-BAND, POLARIZATION-MAINTAINING BENCHTOP EDFA

The full C-band Erbium-doped Fiber Amplifiers (EDFA) are designed for demanding applications. They employ high-power pump lasers and high-stability pump combiners, renowned for robustness in high power boosting. The EDFAs feature high gain with very low noise. The full C-Band EDFAs are polarization-maintaining amplifiers with PM1550 Panda Fiber; non-PM fiber amplifiers are also available in the same output power ranges.

## EASY TO USE, FRONT PANEL OR REMOTE OPERATION

These units provide the user with full control of the output power level by controlling the current of the internal pump lasers. The instrument can be ordered with the optional power feedback mode. The amplifier is controlled via an intuitive front menu and control knob interface, via the RS232 rear panel interface, or can be ordered with an optional ethernet interface. LabVIEW based control software is included with the unit, and ships free of charge.

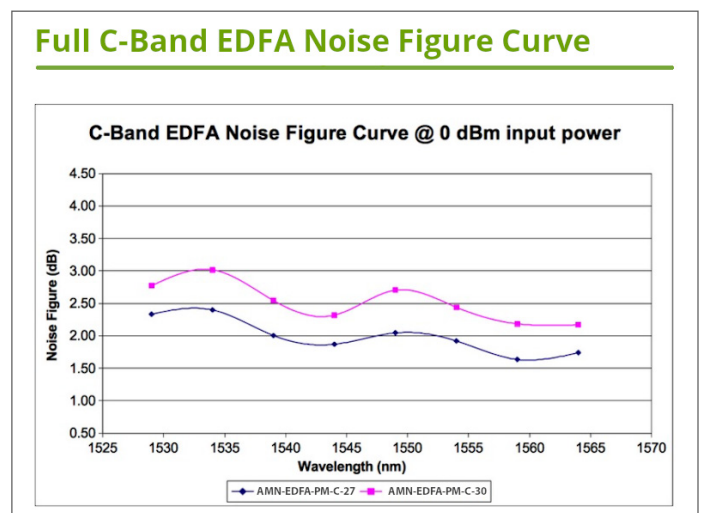
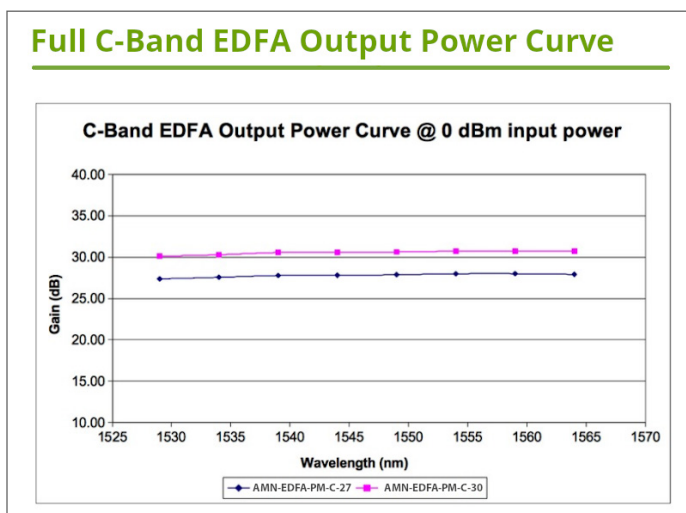
## TELCORDIA-QUALIFIED COMPONENTS & THOUGHTFUL DESIGN

These amplifiers utilize high reliability Telcordia-qualified 976nm high power pump lasers and combiners. In principle, the light from the pump lasers excite the erbium ions embedded in the fiber from their ground state to high excitation levels, and the result is high gain – up to 30 dB. Optical isolators are integrated for both the input and the output.

Careful attention to component selection and circuit board design allow the C-band EDFA to produce high gain at a low noise level. Noise levels of < 6.0 dB with a flat gain profile over the frequency range make these instruments ideal for many applications.

## MULTIPLE POWER OPTIONS

The full C-Band EDFA systems are available with output power levels up to 27 dBm, 30 dBm, and 33 dBm. These amplifiers are also available in non-PM models. Inquire for details on the different options.





**POLARIZATION-MAINTAINING EDFA OPTICAL SPECIFICATIONS**

- Saturation Output: Adjustable up to 2 W (+33 dBm) @1 mW laser input power
- Operational Gain Wavelength Range: 1529nm - 1565nm
- Acceptable Input Laser Source Power Range: -6 dBm to +3 dBm
- Polarization Extinction Ratio: 20 dB (typ)
- Noise Figure: 6.0 dB (max, at 0 dBm Input Signal)
- Standard User Control Mode: ACC (User Adjustable Pump Current)
- Optional User Control Mode: APC (Optical Power Feedback)

**USER INTERFACE (ALL MODELS)**

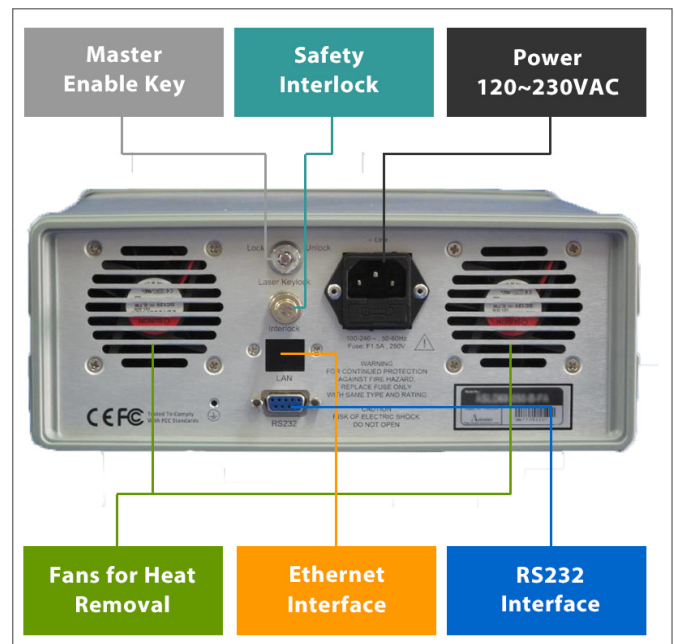
- Alphanumeric Color Front Panel Interface w/ Adjust Knob
- Remote: RS232, LabView Control Software Included
- Remote: RJ-45 (TCP/IP Ethernet optional)
- Optical Connectors IN/OUT: FC/APC
- Optical Fiber: PM 1550nm Panda Fiber
- Optical Connector Options: FC/UPC, SC/APC, SC/UPC

**GENERAL SPECIFICATIONS (ALL MODELS)**

- Operation Temperature: 0 to 40 °C
- Required Mains Power: 90 - 240 (VAC), 47 - 63 Hz
- Dimensions: 260 mm x 330 mm x 120 mm
- Power Monitoring: Output Power (Input Power Monitor Optional)
- Remote Control RS2323 Port: DB-9 female
- TCP/IP/Ethernet optional
- Protection: Pump Lasers (TEC) Over-Temperature
- Protection: Pump Lasers Current Limit
- Optical Fiber: PMF Panda 1550nm PM Fiber
- Connectors: APC (Others Available on Request)
- Safety Control 1: Key-Lock Switch
- Safety Control 2: BNC Interlock
- Safety Control 4: Input Power Loss Detection and Pump Shut Down

**FULL C-BAND EDFA MODELS, POLARIZATION-MAINTAINING**

- 2 Watt Output (33 dBm): AMN-EDFA-PM-C-2W
- 1 Watt Output (30 dBm): AMN-EDFA-PM-C-1W
- 500mW Output (27 dBm): AMN-EDFA-PM-C-500mW





### **PRODUCT SALES AND SERVICE:**

Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by Amonics, Ltd..

### **PRODUCT WARRANTY:**

This product is sold with a full one-year warranty. It is warranted to be free from defects in material and/or workmanship for a period of one year from the date of shipment.



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