

# High Power EDFA for Free-Space Communication Application

## Key Features

- Fiber coupled output up to 30W
- Eye-safe wavelength in 1550nm range
- Narrow linewidth operation
- Turnkey device
- RS232/Ethernet interface

2U Rackmount Casing

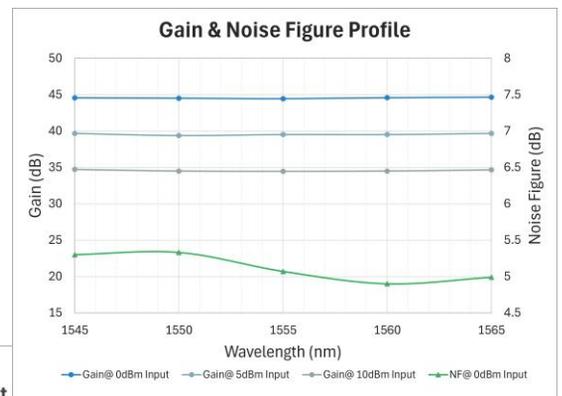


1550nm - CW

## Description

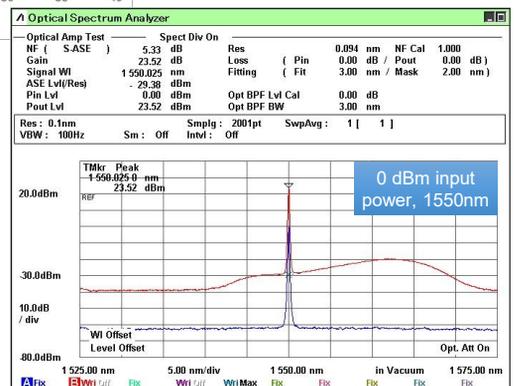
Amonics' High Power EDFA series offers eye-safe, single mode fiber amplifier. This high-power EDFA platform is widely used as a reliable optical amplifier in research environments where thermal stability, spectral integrity, and repeatable performance are critical — particularly in hollow-core fiber characterization and space optical communication research.

The turnkey microprocessor-controlled EDFAs provide illustrative alarms and status indicators. An integrated RS232 computer interface enables easy control, diagnostic functions and data acquisition.



## Application

- Ground-to-satellite optical communication
- Hollow-core fiber testing
- High-capacity optical transmission experiments



ISO 9001 : 2015  
Certificate No.: CC 5346

Our product is manufactured under a HKQAA ISO 9001 certified quality management system. The ISO 9001:2015 certification applies to the Hong Kong production site only.

# High Power EDFA for Free-Space Communication Application

## Specifications

Model	AEDFA-45
Mode of Operation	CW Mode
Saturated Output Power	Min. 28 W, Typ. 30 W
Input Wavelength	1545 nm to 1565 nm
Input Signal Level	0 to +13 dBm
Noise Figure	Max 6.5 dB @ 1550 nm 0 dBm input
Input & Output Isolation	Min. 30 dB
Polarization Dependent Gain	Typ. 0.3 dB, Max. 0.5 dB
Polarization Mode Dispersion	Typ. 0.3 ps, Max. 0.5 ps
Control Mode	ACC, APC (optional)

## General Parameters

	Value
Operation Temperature	0 to +40 °C
Storage Temperature	-10 to 70 °C
Power Supply	90 – 240 VAC, 47 – 63 Hz
Dimensions	485(W) x 360(D) x 90(H) mm or 485(W) x 515(D) x 90(H) mm
Mechanical Safety Control	Key-lock switch, BNC interlock key
Optical Power Monitoring	Output power, Input power (optional)
Remote Control Port	DB-9 female (RS232), Control software included, RJ-45 (TCP/IP Ethernet) (optional)
Protection	Pump Laser (TEC) Overheat, Loss of Input Signal, Output Power Protection
Optical Input / Output Tap Port	FC/APC Receptacle
Optical Output Terminal	Min. 1 m 3mm PVC cable
Optical Fiber	SMF-28

## Ordering Information

Product Code	AEDFA-aa-R-bb	aa : Saturation output power in dBm bb : NC for bare fiber, CL for collimator
--------------	---------------	--

Amonics undertakes continuous and intensive product development to ensure its product performance at the highest technical standards. As a result, the specifications in this document are subject to change without notice.

### Amonics Limited (Hong Kong)

14/F, Lee King Industrial Building, 12 Ng Fong Street,  
San Po Kong, Kowloon, Hong Kong  
Tel :+852 2428 9723 Fax :+852 2428 9704

### Beijing Amonics Co. Ltd. (Beijing)

Room 902, Unit 1 Joy Mansion, NO.99 Chaoyang North Road, Beijing China 100123  
Tel :+86 10 8478 3386 Fax :+86 10 8478 3396  
Email: [contact@amonics.com](mailto:contact@amonics.com) Website: [www.amonics.com](http://www.amonics.com)

