

1550nm 2W polarization-maintaining erbium-doped fiber amplifier (EDFA)



● Product Description

Idealphotonics Optics Amplifier Module Selectable Bands: O-band, S-band, C-band, L-band. Amplifier Types: Booster Amplifier, Pre-Amplifier. Low Noise, Gain Range: 8dB ~ 40dB selectable. The EDFA-C-B-40-ISO Series is a C-band fiber amplifier operating in the 1530-1560nm wavelength range. It has a wide range of applications, including high-speed data signals, image signals, and femtosecond pulse amplification. The amplifier offers excellent gain flatness for WDM signals over the entire L-band. Maximum output, input/output fiber, control methods, and appearance can all be customized.

● Part Number

EDFA-C-B-40-2

● Product features

Output Power: Greater than 5W、Excellent Noise Figure、Flat Gain Spectrum、

Low Cost、Output Power and Pump Current Monitoring with ACC Mode Operation

● Application area

Optical Communication、Testing & Measurement、Scientific Applications

Parameters

Technical parameters

Parameters	Specifications
Input Power	0-10mW
Maximum Output Optical Power (continuously adjustable)	>1W
Amplifier Operating Mode	ACC
Operating Wavelength Range	1530-1560nm
Test Wavelength	1550nm
Input/Output Isolation	>30dB
SMSR	>40dB
Storage Temperature Range	-40℃-75℃
Output Fiber Type	PM1550nm
Output Fiber Connector	FC/APC
Output Fiber Length	>1m
Voltage	220/110AC 60/50Hz
Dimensions	260×320×120mm
Weight	2.5kg

Testing



Testing Steps:

Install the 1550nm DFB laser.

Connect the fiber amplifier to the power supply and turn on the power switch.

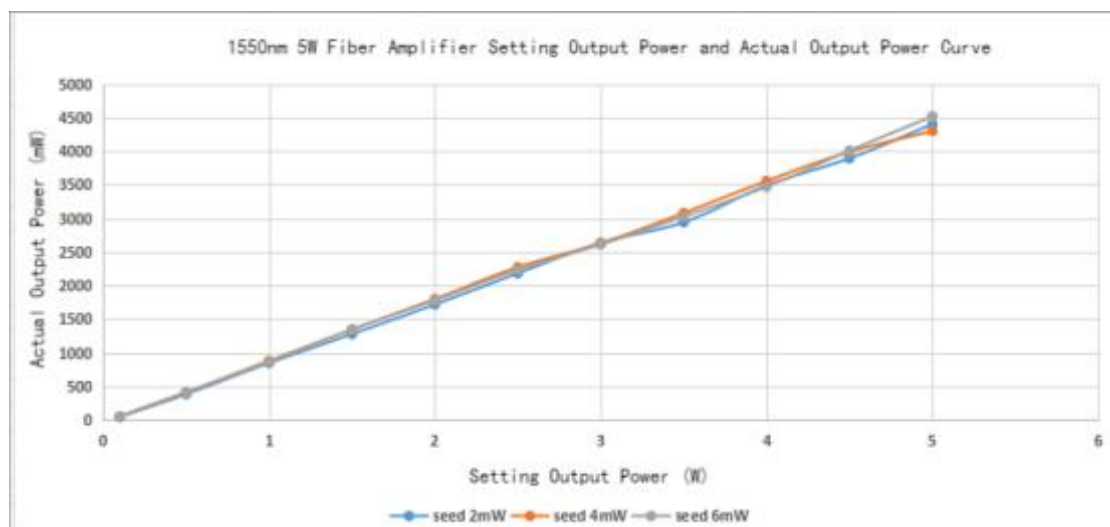
Use a flange to connect the laser output to the input of the fiber amplifier.

Connect the fiber amplifier output to the power meter.

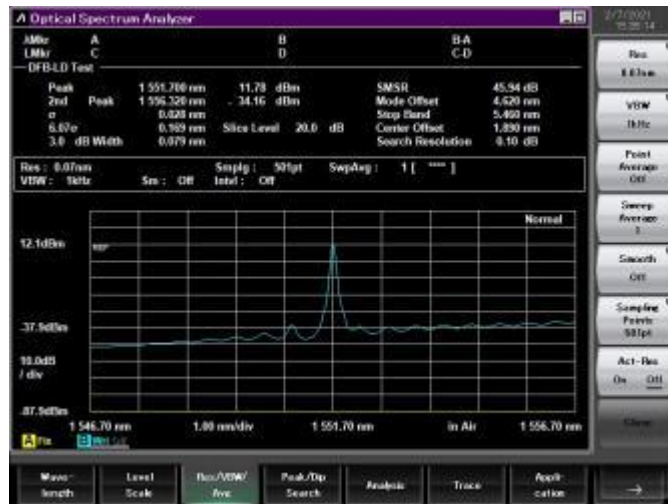
Turn on the seed source, then turn on the key switch of the fiber amplifier, press the enter key, adjust the power using the knob, or coarse/fine tune using the select key, then press the enter key again to see the laser output and monitor the power or spectrum.

When turning off, first turn off the amplifier, then turn off the seed source.

Fiber amplifier power curve



Fiber amplifier output spectrum



(Seed source 6mW, set power 0.1W)

PN#/Ordering info

EDFA-△-PG-OPP-ISO △:

C=C band

L=L Band

C+L=C+L Band

PG: Packaging Type

B: Benchtop

M: Module

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B: Benchtop

M: Module

OPP (Output Power): Output power, in dBm. For example: 16-16 dBm, 23-23 dBm

ISO: Internal Isolator Protection

0 - None

1 - Pump protection