

# O-Band Bismuth-doped Fiber Amplifier (Multi-Channel)

## Key Features

- High output power
- Similar gain & noise figure as typical EDFA
- Lower power consumption compared to conventional Raman amplifier
- Distortion-free amplification



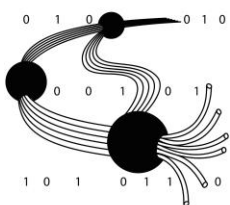
2U Rackmount Casing

## Description

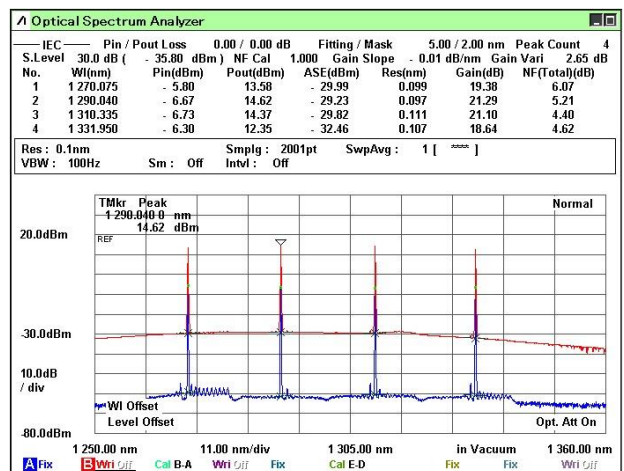
Amonics' O-band Bismuth-doped fiber amplifier (BDFa) uses bismuth-doped fiber as the gain medium. The multi-channel BDFa features flattened gain across the operating wavelength range and very low noise figure. The silica-based Bismuth-doped fiber offers the similar fundamental advantages as erbium-doped fiber used for amplification in the C and L bands.

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

## Application



- Datacom Network



Typical ABDFA-O-DWDM-19 Optical Spectrum



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.



Others

# O-Band Bismuth-doped Fiber Amplifier (Multi-Channel)

## Specifications

Model	ABDFA-O-S-DWDM-19	ABDFA-O-L-DWDM-20
Operating Wavelength	1270 nm to 1330 nm	1290 nm to 1360 nm
Composite Input Power	-30 to 0 dBm	-30 to 0 dBm
Composite Output Power @ 0 dBm composite input power	Min. 19 dBm	Min. 20 dBm
Noise Figure @ 0 dBm composite input power	Typ. 6.5 dB, Max. 7.0 dB	Typ. 6.5 dB, Max. 7.0 dB
Gain Flatness	Max. $\pm 1.5$ dB	Max. $\pm 1.5$ dB*
Input / Output Isolation	Min. 30 dB	Min. 30 dB
Control Mode	ACC	ACC

\* Measured at wavelength range 1310 – 1350 nm

## 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 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 Power Protection
Optical Connector	FC/APC, FC/UPC, SC/APC, SC/UPC
Optical Fiber	SMF-28

## Ordering Information

Product Code	ABDFA-O-S-DWDM-aa-b-cc ABDFA-O-L-DWDM-aa-b-cc	aa : Composite Output Power in dBm b : R for 19" Rackmount cc : FA for FC/APC, FC for FC/UPC, SA for SC/APC, SC for SC/UPC
--------------	--	--

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)

