Ytterbium-doped Fiber Amplifier (YDFA)

Amonics
Specialist in Optical Amplifiers

1060nm - CW

Key Features

- Turnkey Device
- RS232 computer interface
- High output power
- Single mode fiber delivery
- Highly reliability
- Long operating life time

Benchtop Casing

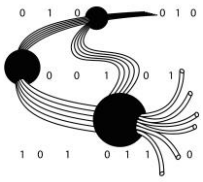
2U Rackmount Casing

Description

Ytterbium-doped Fiber Amplifier (YDFA) is one of the Amonics' specialized product line. Like our highly recognized optical amplifiers, the YDFA offers high output power and high gain with exceptional reliability, which is ideal for high power YDFA applications.

The turnkey microprocessor controlled benchtop YDFAs manage alarms and status indicators. An integrated RS232 or Ethernet computer interface enables easy control, diagnostic functions and data acquisition. Available options include single frequency operation, linearly polarized operation.

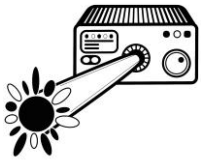
Application



- Phased and Interferometric Array Antenna

- Fiber Optic Sensing

- SHG Applications



- Medical Systems
- Industrial Lasers

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

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Benchtop YDFA Specifications

Model	AYDFA-18	AYDFA-20	AYDFA-23
Saturation Output Power (at 0dBm input signal)	Min. +18 dBm	Min. +20 dBm	Min. +23 dBm
Operating Wavelength	1054 nm to 1074 nm	1054 nm to 1074 nm	1054 nm to 1074 nm
Input / Output Isolation	Min. 25 dB	Min. 25 dB	Min. 25 dB
Polarization Dependent Gain	Typ. 0.3 dB, Max. 0.5 dB	Typ. 0.3 dB, Max. 0.5 dB	Typ. 0.3 dB, Max. 0.5 dB
Control Mode	ACC, APC, AGC (optional)	ACC, APC, AGC (optional)	ACC, APC, AGC (optional)

Operating wavelength extension to 1090 nm and other output power models are available upon request

Option: 1) Linear polarized
2) Narrow bandpass filter

Benchtop High Power YDFA Specifications

Model	AYDFA-27	AYDFA-30	AYDFA-33
Saturation Output Power (at 0dBm input signal)	Min. +27 dBm	Min. +30 dBm	Min. +33 dBm
Operating Wavelength	1054 nm to 1074 nm	1054 nm to 1074 nm	1054 nm to 1074 nm
Input / Output Isolation	Min. 25 dB	Min. 25 dB	Min. 25 dB
Polarization Dependent Gain	Typ. 0.3 dB, Max. 0.5 dB	Typ. 0.3 dB, Max. 0.5 dB	Typ. 0.3 dB, Max. 0.5 dB
Control Mode	ACC, APC, AGC (optional)	ACC, APC, AGC (optional)	ACC, APC, AGC (optional)

Operating wavelength extension to 1090 nm and other output power models are available upon request

Option: 1) Linear polarized
2) Narrow bandpass filter

Rackmount High Power YDFA Specifications

Model	AYDFA-37	AYDFA-40	AYDFA-43
Saturation Output Power (at 10dBm input signal)	Min. +37 dBm	Min. +40 dBm	Min. +43 dBm
Operating Wavelength	1054 nm to 1074 nm	1060 nm to 1074 nm	1064 nm to 1074 nm
Input Isolation	Min. 25 dB	Min. 25 dB	Min. 25 dB
Output Isolation	Min. 20 dB	Min. 20 dB	Min. 20 dB
Polarization Dependent Gain	Typ. 0.3 dB, Max. 0.5 dB	Typ. 0.3 dB, Max. 0.5 dB	Typ. 0.3 dB, Max. 0.5 dB
Control Mode	ACC, APC (optional)	ACC, APC (optional)	ACC, APC (optional)

Operating wavelength extension to 1090 nm and other output power models are available upon request

Option: 1) Linear polarized
2) Narrow bandpass filter

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General Parameters

	Value
Operation Temperature	0 to 40 °C
Storage Temperature	-10 to 70 °C
Power Supply	90 – 240 VAC, 47 – 63 Hz
Benchtop Dimensions	260(W) x 330(D) x 120(H) mm
2U Rackmount Dimensions	485(W) x 515(D) x 90(H) mm or 485(W) x 360(D) x 90(H) mm
3U Rackmount Dimensions	485(W) x 615(D) x 150(H) mm
Mechanical Safety Control	Key-lock switch, BNC interlock key, Emergency Stop Button [for Output Power >2W and 2U rackmount]
Optical Power Monitoring	Output power, Input power [Output Power > 0.5W]
Remote Control Port	DB-9 female (RS232), Control software included, RJ-45 (TCP/IP Ethernet) (optional)
Protection	Loss of input power, Output power protection [Output Power > 0.5W], Pump laser (TEC) overheat
Optical Connector	FC/APC, FC/UPC, SC/APC, SC/UPC, Bare fiber
Optical Fiber	HI 1060

Ordering Information

Product Code	AYDFA-aa-b-cc	aa : Saturation output power in dBm b : B for Benchtop case, R for 19" Rackmount case cc : FA for FC/ APC, FC for FC/UPC, SA for SC/APC, SC for SC/UPC, NC for bare fiber

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.

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