

## Key Features

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

Benchtop Casing



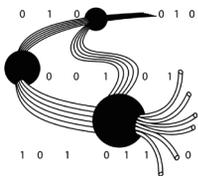
2U Rackmount Casing

1060nm - Pulsed

## Description

Amonics' pulse YDFA can amplify 1  $\mu$ m short pulse to high optical pulse energy. By using large core specialty Ytterbium fiber, the detrimental effects such as pulse distortion due to gain transient and nonlinearities such as SBS and SRS can be highly suppressed. The applications of the YDFAs include laser welding, material processing, biomedical treatments, and free space sensing as such airborne topographic lidars.

## 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.

## High Power Pico-second YDFA Specifications

Model	AYDFA-PS	AYDFA-PM-PS
Operating Wavelength	1054 nm to 1074 nm	1054nm to 1074nm
Saturation Output Power up to	+33 dBm	+33 dBm
Pulse Peak Power up to (No distortion)	1 kW	1 kW
Input Signal Peak Level	+10 dBm	+10 dBm
Pulse Width	50 ps to 1000 ps	50 ps to 1000 ps
Pulse Repetition Rate	1 MHz to 10 GHz	1 MHz to 10 GHz
Input Isolation	Min. 25 dB	Min. 25 dB
Output Isolation	Min. 20 dB	Min. 20 dB
Polarization Dependent Gain	Typ. 0.3 dB, Max. 0.5 dB	NA
Polarization Extinction Ratio	NA	Typ. 23 dB, Min. 20 dB
Control Mode	ACC, APC (Option)	ACC, APC (Option)

\* Other wavelength ranges and output power models are available upon request  
Option: Narrow bandpass filter

## High Power Nano-second YDFA Specifications

Model	AYDFA-NS	AYDFA-PM-NS
Operating Wavelength	1054 nm to 1074 nm	1054 nm to 1074 nm
Saturation Output Power up to	+40 dBm	+40 dBm
Pulse Peak Power up to (No distortion)	10 kW	10 kW
Input Signal Peak Level	+10 dBm	+10 dBm
Pulse Width	10 ns to 1000 ns	10 ns to 1000 ns
Pulse Repetition Rate	20 kHz to 100 MHz	20 kHz to 100 MHz
Input Isolation	Min. 25 dB	Min. 25 dB
Output Isolation	Min. 20 dB	Min. 20 dB
Polarization Dependent Gain	Typ. 0.3 dB, Max. 0.5 dB	NA
Polarization Extinction Ratio	NA	Typ. 23 dB, Min. 20 dB
Control Mode	ACC, APC (Option)	ACC, APC (Option)

\* Other wavelength ranges and output power models are available upon request  
Option: Narrow bandpass filter

## 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 for AYDFA-PS and AYDFA-PM-PS
2U Rackmount Dimensions	485(W) x 515(D) x 90(H) mm or 485(W) x 360(D) x 90(H) mm for AYDFA-NS and AYDFA-PM-NS
3U Rackmount Dimensions	485(W) x 615(D) x 150(H) mm for AYDFA-NS and AYDFA-PM-NS
Control	Key-lock switch, optical output power
LCD Display	Output power, Pump laser current
Computer Interface	RS232 (Control software & connection cable included) / Ethernet (Optional)
Protection	Pump laser overheat warning
Optical Connector	FC/APC, FC/UPC, SC/APC, SC/UPC, Collimator, Bare fiber (No output connectors for output power >2W)
Optical Fiber	HI 1060 for AYDFA-PS, PM980 for AYDFA-PM-PS; 25/250GDF for AYDFA-NS, PM-25/250GDF for AYDFA-PM-NS

## Ordering Information

Product Code	AYDFA(-PM)-PS-aaa-bbb-cc-B-dd AYDFA(-PM)-NS-eee-fff-cc-R-dd	aaa: Pulse Width in ps eee: Pulse Width in ns bbb: Repetition Rate in MHz fff : Repetition Rate in kHz cc : Average Output Power in dBm dd : FA for FC/APC, FC for FC/UPC, SA for SC/APC, SC for SC/UPC, CL for collimator, NC for Bare fiber
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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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