

Applications

- Wind-speed Measurement
- Range Finder
- Pollution Monitoring
- 3D Imaging



Description

Amonics' Narrow Linewidth Pulse EDFA series offers eye-safe, single mode, linear polarized nanosecond-pulsed amplifier.

It is designed for three-dimensional imaging, wind detection and ranging LiDAR systems. The Narrow Linewidth Pulse EDFA series is maintenance free with no post-installation service required. It is a versatile, ready-to-use and durable laser source for various LiDAR applications.

Key Features

- Pulse energy up to $150\mu\text{J}$
- Eye-safe wavelength – 1550nm
- Linear polarization emission
- Pulse duration from 100 to 1000ns
- Pulse repetition rate from 10 to 20kHz
- Narrow linewidth, down to 1.6kHz
- Low RIN & phase noise
- Wide operating temperature, from -10 to $+60^{\circ}\text{C}$
- Maintenance free
- High reliability



Specifications

Parameters	Unit	Specifications		
Product Code	-	AEDFA-PM-NS-200-20-23	AEDFA-PM-NS-200-20-27	AEDFA-PM-NS-200-20-33
Mode of Operation	-	Nano-second pulse		
Input Power Range	dBm	-18 to 0		
Average Output Power	dBm	Min. 23	Min. 27	Min. 33
Pulse Energy	μJ	Min. 10	Min. 40	Min. 150
Pulse Width	ns	100 to 1000	100 to 1000	100 to 500
Repetition Rate	kHz	10 to 20	10 to 20	10 to 20
Wavelength	nm	1550 ± 0.2 (other wavelengths are available)		
PER	dB	Typ. 23, Min. 20	Typ. 20, Min. 17	Typ. 20, Min. 17
Pulse On / Off Ratio	dB	Typ. 100, Min. 80	Typ. 100, Min. 80	Typ. 100, Min. 80

General Parameters

Parameters	Unit	Specifications
Operation Case Temperature	°C	-10 to +60
Storage Case Temperature	°C	-30 to +80
Power Supply	VDC	+12 ± 0.25
Dimensions	mm	AEDFA-PM-NS-200-20-23-M: 120(W) x 200(D) x 25(H) AEDFA-PM-NS-200-20-33-M: 200(W) x 200(D) x 45(H)
Power Consumption	W	AEDFA-PM-NS-200-20-33-M: Typ. 54, Max. 72
LED Status Indicators	-	Power on, Case temperature overheat, Loss of input power
Remote Control Port	-	RS232
Protection	-	Overheat auto shutdown
Cooling	-	Air cooling
Output Termination	-	Min. 30cm long 3mm tubing PM fiber with FC/APC connector or collimator



Ordering Information

Product Code	AEDFA-PM-NS-xxx-yy-zz-M-FA	xxx : Pulse Width in ns yy: Repetition Rate in kHz zz: Average Output Power in dBm
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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.

Amonics Limited, 14/F, Lee King Industrial Building, 12 Ng Fong Street, San Po Kong, Kowloon, Hong Kong

Beijing Amonics Co. Ltd. Room 902, Unit 1, No.99 Chaoyang North Road, Beijing China 100025

Email: contact@amonics.com Website: www.amonics.com

HK Tel: +852 2428 9723

HK Fax: +852 2428 9704

Beijing Tel: +86 10 84783386

Beijing Fax: +86 10 84783396