

Features

- * Energy per pulse up to 0.35mJ
- * High peak power up to 30kW
- * Build-in isolator
- * Maintenance free
- * Random or linear polarization
- * RS-232 interface for local supervision

Applications

- * LIDAR
- * Airborne survey
- * Mapping/3D scanning
- * Harmonic generation

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Description

GIP Technology High Energy Nanosecond Erbium Fiber Amplifier Unit (AMP-EFA-NS-HE-U) is the 1.5 μ m band pulsed fiber laser transmitters, delivering high peak power (up to 30kW) and high energy per pulse (up to 0.35mJ) in standalone or compact modules size for long-range applications

The AMP-EFA-NS-HE-U series provides a variety of models that can operate under various



operating conditions, such as pulse duration, pulse repetition frequency and energy, suitable for airborne 3D scanning and mapping, telemetry, harmonic, development (R&D) environments, and supercontinuum generation applications

The AMP-EFA-NS-HE-U does not need water cooling or replacement parts, only 110/220V AC power supply or +5V/+12/+24 DC power supply is needed to obtain high energy and high peak power pulsed laser.

In addition, these units also provide a user-friendly status monitoring via an LCD display, LED indicators, and various communication interfaces (RS232).



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High Energy Nanosecond Erbium Fiber Amplifier Unit

AMP-EFA-NS-HE-U

Specifications

Optical Information		Unit	Description	
Saturated output power	Max.	Watt	2	10
Mode of operation			Pulsed	
Center wavelength* ¹		nm	1550±5	
Input average power		μW	10 ~ 30	
Pulse repetition rate* ²		kHz	5 ~ 1000	
Pulse duration* ³			3 ~ 200	
Pulse energy	Max.	μJ	80	350
Peak power	Max.	kW	10	30
Beam quality	Max.	M ²	1.1	1.6
Polarization			Random or Linear	
Polarization extinction ratio* ⁴	Min.	dB	20	17
Power tunability		%	10 ~ 100	
Output fiber length	Min.	M	0.5	
Connector			FC/APC or Collimator	
Electrical Information				
Operating voltage		Volt	100 ~ 240VAC, 50/60Hz	
Control mode			ACC	
Control interface			RS-232	
Pulse timing			External trigger, TTL	
Environmental Information				
Operating ambient temperature		°C	0 ~ 60	15 ~ 35
Storage temperature		°C	0 ~ 60	
Relative humidity (non-condense)		%	5 ~ 85 (operating)	
Cooling			Air cooling	
Mechanical Information				
Dimension (W x L x H)* ⁵		mm	Benchtop	19" 2U

*1. Available in other wavelengths

*2. Low repetition rate operation on request.

*3. Calculated by full width at half maximum (FWHM).

*4. For PM version only

*5. OEM module versions available with DC+5/+12/+24V operating voltage.