High Energy Nanosecond Erbium Fiber Laser Unit
LAS-EFL-NS-HE-U

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

Description

GIP Technology High Energy Nanosecond Erbium Fiber Laser unit (LAS-EFL-NS-HE-U) is the 1.5μm band pulsed fiber laser transmitters, delivering high peak power (up to 30kW) and high energy per pulse (up to 0.35mJ) in standalone size for long-range applications.

The LAS-EFL-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 LAS-EFL-NS-HE-U does not need water cooling or replacement parts, only 110/220V AC power supply is needed to obtain high energy and high peak power pulsed laser. The laser can also be made into OEM module version, using DC +12/+24V working voltage.

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

GIP
Brightening Your Solutions

GIP Technology Corporation
6F., No. 112, Xinmin St., Zhonghe Dist.,
New Taipei City 235, Taiwan (R.O.C.)
T:+886-2-8226-7855 www.giptek.com
F:+886-2-8226-7955 sales@giptek.com

Specifications

Optical Information		Unit	Description	
Saturated output power	Max.	Watt	2	10
Mode of operation			Pulsed	
Center wavelength*1		nm	1550±5	
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	
Outout 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 ~ 50	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 +12/+24V operating voltage.