

Single-Frequency Ytterbium Fiber Laser Unit

LAS-EFL-SF-LP-U

Features

- * Ultra-narrow linewidth < 3kHz
- * High out power up to 30W
- * Build-in isolator
- * Maintenance free
- * Random or linear polarization
- * Front panel LCD display and status LED indicators for quick access of unit's status
- * RS-232 or Ethernet interface for remote supervision.

Applications

- * LIDAR
- * Holography & interferometry
- * Atom cooling
- * Atom trapping
- * CW Mid-IR OPO pumping
- * High Resolution CW Spectroscopy
- * Acoustic or seismic sensing

Description

GIP Technology Single-Frequency Erbium Fiber Laser Unit (LAS-EFL-SF-LP-U), which architecture allows keeping the seeder properties whatever the output power, are available CW output power up to 30W with a PM ultra-narrow linewidth seeder (down to 1 kHz). The single frequency fiber system embedded several isolators to ensure stability and security versus backlight reflection.



The LAS-EFL-SF-LP-U do not need water-cooling or replacement parts and requires only a 110/220V AC power source (or DC voltage) to generate the 1.5um CW laser. It can be used in the components, atom trapping, optical tweezers or sub-assembly manufacturing as well as research and development (R&D) environments.

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



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	30
Mode of operation			CW		
Center wavelength ^{*1}		nm	1545 ~ 1565		
Beam quality	Max.	M ²	1.1		1.2
Linewidth ^{*2,3}	Max.	kHz	20		
Polarization			Random or Linear		
Polarization extinction ratio ^{*4}	Min.	dB	20		17
Output power stability, RMS ^{*5}	Max.	%	3		4
Power tunability		%	10 ~ 100		
Output fiber length	Min.	M	0.35		
Connector			FC/APC or Collimator		
Electrical Information					
Operating voltage		Volt	100 ~ 240VAC, 50/60Hz		
Control mode ^{*6}			APC or ACC		
Control interface			RS-232		
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) ^{*7}		mm	Benchtop	19" 2U	19" 3U

*1. Specify by ITU Grid Channel

*2. MHz, GHz, and THz linewidth are available on request.

*3. Available in linewidth < 3 kHz

*4. For PM version only

*5. Measured at room temperature, RMS for 8 hours.

*6. Ask for APC or ACC.

*7. OEM module versions available.