

Single-Frequency Ytterbium Fiber Laser Unit

LAS-YFL-SF-LP-U

Features

- * Ultra-narrow linewidth < 3kHz
- * High out power up to 50W
- * 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

- * Holography & interferometry
- * Atom trapping
- * CW Mid-IR OPO pumping
- * High Resolution CW Spectroscopy Fiber sensing

Description

GIP Technology Single-Frequency Ytterbium Fiber Laser Unit (LAS-YFL-SF-LP-U), which architecture allows keeping the seeder properties whatever the output power, are available CW output power up to 50W 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-YFL-SF-LP-U do not need replacement parts and requires only a 110/220V AC power source (or DC voltage) to generate the 1.0um 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).



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Specifications

Optical Information		Unit	Description			
Saturated output power	Max.	Watt	2	10	30	50
Mode of operation		CW				
Center wavelength ^{*1}		nm	1064 ~ 1083			
Beam quality	Max.	M ²	1.1		1.3	
Linewidth ^{*2}	Max.	kHz		20		
Polarization		Random or Linear				
Polarization extinction ratio ^{*3}	Min.	dB	20		17	
Output power stability, RMS ^{*4}	Max.	%	3		4	
Power tunability		%	10 ~ 100			
Outout fiber length	Min.	M	0.35			
Connector	FC/APC or Collimator		Collimator			
Electrical Information						
Operating voltage	Volt		100 ~ 240VAC, 50/60Hz			
Control mode ^{*5}	APC or ACC					
Control interface	RS-232					
Environmental Information						
Operating ambient temperature	°C		15 ~ 35			
Storage temperature	°C		0 ~ 60			
Relative humidity (non-condense)	%		5 ~ 85 (operating)			
Cooling ^{*6}	Air cooling					
Mechanical Information						
Dimension (W x L x H) ^{*7}	mm	Benchtop	19" 2U	19" 4U	19" 4U	

*1. Available in other wavelengths, such as 1018nm, 1030nm, 1053nm, 1100nm...etc.

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

*3. For PM version only

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

*5. Ask for APC or ACC.

*6. Available in water cooling.

*7. OEM module versions available.