

### Features

- \* Output power up to 1.2kW
- \* Direct modulation rate up to 50kHz
- \* High reliability
- \* RS-232, Ethernet interface for remote supervision.
- \* I/O Interface Compliant with Industrial Interface

### Applications

- \* Welding
- \* Precision Cutting
- \* 3D Printing
- \* Scientific and Advanced applications

### Description

**GIP Technology** Ytterbium Fiber Laser Unit for Industrial Applications (LAS-YFL-IND-00-U) are designed to provide a combination of high power (0.1 ~ 1.2kW), high stability, and ideal beam quality ( $M2 < 1.1$ ). These lasers can be modulated at frequencies up to 50 kHz. The high power LAS-YFL-IND-00-U fiber lasers are widely used for laser processing applications such as cutting, welding, marking and 3D printing. The



The LAS-YFL-IND-00-U which are constructed by Fabry-Pérot cavity structure provide the OEM module or standalone version.

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.

The compact 19" rack mounted packages (LAS-YFL-SF-LP-U) offered as a cost effective, adaptable. solution for integration into a production line. In addition, the LAS-YFL-SF-LP-U provides a friendly user-interface to quickly access and set all YFL parameter via I/O, Analog, RS-422, RS-232 and Ethernet interface.



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### Specifications

Optical Information		Unit	Description				
Saturated output power	Max.	Watt	100	300	500	1000	1200
Mode of operation			CW & Modulated				
Center wavelength* <sup>1</sup>		nm	1070±10				
Modulation frequency	Max.	kHz	50				
Beam quality	Max.	M <sup>2</sup>	1.1				
Polarization			Random				
Red guide laser			Yes				
Output power stability* <sup>2</sup>	Max.	%	± 2% (peak-to-peak)				
Power tunability		%	10 ~ 100				
Fiber termination			Compatible with the Standard QBH Interface				
Electrical Information							
Operating voltage		Volt	1 ph, 50/60 Hz, 100-240 VAC		1 ph, 50/60 Hz, 220-240 VAC		
Control interface			Analog, RS-422, RS-232 and Ethernet				
Environmental Information							
Operating ambient temperature		°C	0 ~ 40				
Storage temperature		°C	-10 ~ +60				
Relative humidity (non-condense)* <sup>3</sup>		%	10 ~ 80 (operating)				
Cooling* <sup>4</sup>			Water cooling				
Mechanical Information							
Dimension (W x L x H)* <sup>5</sup>		mm	19" 3U			19" 4U	

\*1. Other wavelengths in 1018-1080 nm range are available upon request

\*2. Measured over 4 hours, T = constant

\*3. 36°C Max Dew Point

\*4. Available in air cooling

\*5. OEM module versions available