

High Power Nanosecond Ytterbium Fiber Laser Unit

LAS-YFL-NS-HP-U

Features

- * High energy per pulse up to 0.5mJ
- * High peak power up to 40kW
- * 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 interface for local supervision.

Applications

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

Description

GIP Technology High Power Nanosecond Ytterbium Fiber Laser Unit (LAS-YFL-NS-HP-U) is the 1 μ m band pulsed fiber laser transmitters, delivering high peak power and high energy per pulse in standalone or compact modules size for long-range applications.

The LAS-YFL-NS-HP-U 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-YFL-NS-HP-U does not need water cooling or replacement parts, only 110/220V AC power supply or +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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Specifications

Optical Information		Unit	Description		
Saturated output power	Max.	Watt	2	10	30
Mode of operation			Pulsed		
Center wavelength* ¹		nm	1064±5		
Pulse repetition rate* ²		kHz	5 ~ 1000		
Pulse duration* ³			3 ~ 500		
Pulse energy	Max.	μJ	25	200	500
Pulse power	Max.	kW	25	25	40
Beam quality	Max.	M ²	1.1	1.3	1.6
Polarization			Random or Linear		
Polarization extinction ratio* ⁴	Min.	dB	20	17	
Power tunability		%	10 ~ 100		
Output fiber length	Min.	M	0.35		
Connector			FC/APC or Collimator		Collimator
Electrical Information					
Operating voltage		Volt	100 ~ 240VAC, 50/60Hz		
Control mode			ACC		
Control interface			RS-232/USB		
Pulse timing			External trigger, TTL		
Environmental Information					
Operating ambient temperature		°C	0 ~ 40	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	19" 3U

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

*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.