

High Power Picosecond Erbium Fiber Laser Unit

LAS-EFL-PS-HP-U

Features

- * Average power up to 10W
- * All-fiber design, industrial reliability
- * High peak power up to 20kW
- * 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

- * Material processing
- * Semiconductor inspection
- * Harmonic generation
- * OPO pumping
- * Pump-probe

Description

GIP Technology High Power Picosecond Erbium Fiber Laser unit (LAS-EFL-PS-HP-U) is the 1.5 μ m band picosecond fiber laser transmitters, delivering high peak power (up to 20kW) in standalone size for material processing, semiconductor inspection, and supercontinuum generation applications.

Our integral all-fiber design and splicing technology enable



compact lasers. Compared with the traditional rod or disc DPSS laser. The peak intensity of a laser pulse with a duration of only a few picoseconds is so high that nonlinear/multi-photon absorption occurs, resulting in a very precise "cold" process with little thermal effect.

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	4	10
Mode of operation			Pulsed		
Center wavelength ^{*1}		nm	1550±5		
Pulse repetition rate ^{*2}		MHz	10 ~ 100		
Pulse duration ^{*3}	Max.	ps	50		
Peak power	Max.	kW	5	10	20
Beam quality	Max.	M ²	1.1	1.2	1.3
Polarization			Random or Linear		
Polarization extinction ratio ^{*4}	Min.	dB	20		
Power tunability		%	10 ~ 100		
Output fiber length	Min.	M	0.5		
Connector			FC/APC or Collimator		
Electrical Information					
Operating voltage		Volt	100 ~ 240VAC, 50/60Hz		
Control mode			ACC or APC		
Control interface			RS-232		
Pulse timing			External trigger, TTL		
Environmental Information					
Operating ambient temperature		°C	15 ~ 35		
Storage temperature		°C	0 ~ 60		
Relative humidity (non-condense)		%	5 ~ 85 (operating)		
Cooling			Air cooling		
Mechanical Information					
Dimensions (W x L x H)		mm	Benchtop	19" 2U	19" 3U

*1. Other wavelength on request

*2. Lower and higher repetition rate operation on request.

*3. Other pulse duration on request.

*4. For PM version only