

New !!!

Femtosecond Pulsed Fiber Laser with High Average Output Power

Calmar introduces a new femtosecond pulsed fiber laser FPL-05 series to the market. The laser provides up to 5 W high average output power and 1 MW peak power, to the end users. FPL-05 consists of a master laser source and a free-space based pulse compressor. The operation is a simple plug-and-play, with no need of cooling.

FPL-05 is a passively mode locked fiber laser that generates optical pulses with a pulsewidth less than 0.3 ps. The repetition rate is pre-selectable in the range of 10 ~ 50 MHz and the wavelength covers 1550 nm and 1064 nm bands.

FPL-05 is simple and intuitive to operate. The operation is turn-key based and requires no external RF source or warm-up.

The optional synchronization output frequency can be the fundamental or harmonics of the repetition rate of the laser. In addition, the laser pulses can be phase-locked to an external RF clock or another laser source with very low timing jitter by implementing our proprietary PLL technology.

FPL-05 is a versatile optical source. The laser is ideal for optical nonlinearity study, biomedical imaging and treatment, seed laser of ultra high output power laser, terahertz radiation, and material processing.



- Pulse widths <300fs
- Wavelength: 1550 nm and 1064 nm
- Average output power: up to 5 W
- Repetition rate: 10-50 MHz
- Light weight and compact

Optional Upgrades

- Phase locking to external clock
- Synchronization output

Technical Specifications

Model Number		FPL-05C	FPL-05U
Pulse width (ps)		0.3	0.5
Central Wavelength (nm)		1550	1064
Repetition Rate (MHz)		10 ~ 50	
Average Power (W)		1 ~ 5 (selectable)	1 ~ 5 (selectable)
Output Beam		Free space, diameter 4 mm (typical), $M^2 < 1.2$	
Dimension (cm)	Fiber Laser	48 (w) x 42(d) x 9 (h)	
	Compressor	48 (w) x 42(d) x 9 (h)	
Operating Temp (°C)		5 ~ 40	
Operating Voltage (VAC)		85 ~ 250	

Specifications are subject to change without notice. 08/30/2007

Safety information: the product complies with FDA radiation performance standards 21 CFR 1040.10 as Class IV

