

Femtosecond Pulsed Laser Module

Calmar's femtosecond fiber laser module FPL-M is the most compact optical short pulse generator commercially available. It can be used either as a stand-alone laser source with a 5V DC power supply or a separate drive or as an OEM module to be integrated into end user's application systems.

FPL-M2 and FPL-M3 are passively mode-locked fiber laser modules with high quality optical pulses (transform limited with low pedestals). FPL-M3 provides higher output power. The timing jitter from this module is as low as 100 fs. The optical wavelength can be customized throughout the C-band. It offers high peak power. The fixed repetition rates are available in the range of 10 ~ 100 MHz. The module can generate optical pulses in a selectable pulsewidth range within 0.1 ~ 20 ps.

FPL-M is simple to operate. The built-in electronics driver allows it to self-start and be remotely controllable. It features a RF synchronization output to provide trigger signals.

FPL-M's wide range of applications includes optical receiver characterization, optical high speed sampling, terahertz radiation, optical switching, material characterization, and optical metrology. If you want to apply a high performance short-pulse laser source for your limited space, this is an ideal solution.



Features:

- Pulse widths and output power tunable
- Wavelength pre-selectable within 1535 ~ 1565 nm
- Transform-limited pulse with Low pedestals
- Synchronization output (SMA female)
- Small footprint
- No warm-up time required
- No external RF source required
- Stand-alone operation or OEM integration
- Easy to operate

Optional Upgrades

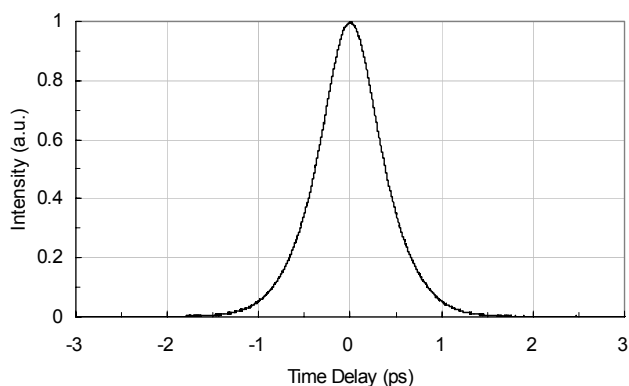
- PM Output

Technical Specifications

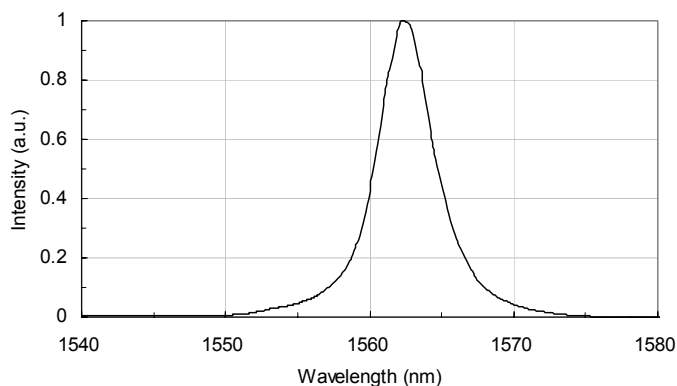
Model Number	FPL-M2CFF	FPL-M3CFF
Pulse width (ps)	0.3 ~ 5 (Fixed with a certain tunable range)	0.1 ~ 1 (Selectable)
Wavelength (nm)	1535 ~ 1565 (Fixed)	
Repetition Rate (MHz)	20 (Other repetition rate within 10 ~ 100 MHz available)	
Peak Output Power (W)	300 (Typical)	10k (at 0.1 ps pulsewidth)
Average Output Power (mW)	5 (Typical)	20 (Typical)
Timing Jitter (fs)	< 100 (Carrier offset 100 Hz ~ 1M Hz)	
Spectral Width (nm)	5 (Typical)	20 (Typical)
Operating Voltage (V)	4.5 ~ 5.5 DC	
Dimensions (cm)	9.5(w) x 12.7(d) x 2.0(h)	9.5(w) x 12.7(d) x 4.0(h)

Not all specifications can be combined together, please call manufacturer for customization.

Specifications are subject to change without notice - 02/04/2005



Autocorrelation trace of pulsewidth 500 fs



Optical spectrum trace of pulsewidth 500 fs

The product complies with FDA radiation performance standards 21 CFR 1040.10 and 1040.11

