

780 nm Femtosecond Pulsed Laser

Calmar's 780 nm femtosecond pulsed fiber lasers FPL-R2 series provide versatile optical sources for characterizing the femtosecond time response of opto-electronic components and systems, enables scientists and engineers to explore many new application areas.

FPL-R2's wavelength can be tuned within 765 ~ 780nm range. The direct output from the laser produces high quality optical pulses with characteristics of near transform-limited and low pedestals. The direct output offers high peak power of kW. The timing jitter from this passively mode-locked fiber laser is as low as 100 fs. The fixed repetition rates are available in the range of 10 ~ 100 MHz.

FPL is simple and intuitive to operate. The operation is turn-key and requires no external RF source or warm-up. Both free space output and fiber coupled output available for the convenience of the user.

The optional synchronization output frequency can be the fundamental or harmonics of the repetition rate of the laser.

The versatile FPL series have a wide range of applications for optical research and product development. It is ideal for optical receiver characterization, optical sampling, biomedical, optical switching, optical nonlinearity study and material characterization.



- Wavelength 765 ~ 780 nm tunable
- Transform-limited output
- Low pedestals

Optional Upgrades

- Repetition rate stabilizer
- PM output
- Phase locking to external clock
- Synchronization output with bandwidth $> 3\text{GHz}$ or customization
- Pre-selectable pulsewidth and output power

Applications

- Ti-Sapphire amplifier seeding
- Two-photon microscope
- Semiconductor equipment
- Bio-medical
- Metrology

Technical Specifications

Model Number	FPL-R2-FF	FPL-R2-PF	FPL-R2-FT	FPL-R2-PT
Pulse width (fs)	150	300	200	400
Output	Free Space	Fiber Coupled	Free Space	Fiber Coupled
Wavelength (nm)	780		765 ~ 780	
Repetition Rate (MHz)	20 (Other repetition rate within 10 ~ 100 MHz available)			
Peak Output Power (W)	2K	500	1.2K	300
Average Output Power (mW)	6 (typical)	3 (typical)	4 (typical)	2 (typical)
Timing Jitter (fs)	< 100 (Carrier offset 100 ~ 1M Hz)			
Spectral Width (nm)	4 nm typical	6 nm typical	4 nm typical	6 nm typical
Operating Temp (°C)	5 - 40			
Operating Voltage (V)	85 - 264 AC			
Dimensions (cm)	34(w) x 42(d) x 9(h)			

Specifications are subject to change without notice - 11/5/2004

