

1 μ m High Power Femtosecond Pulsed Laser

Calmar's FPL-03U is a 1.06 μ m high power femtosecond fiber laser. It is a passively mode-locked femtosecond fiber laser featuring up to 400mW average output power and wide range of pulse widths from 0.1 to 10 ps.

FPL-03UFF generates optical pulses at fixed wavelengths while FPL-03UFT operates at a widely tunable range throughout 1030 ~ 1070 nm.

FPL-03U is simple and intuitive to operate. The operation is turn-key and requires neither external RF source nor warm-up.

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

FPL-03U is a versatile optical source, with combined advantage of high power and ease-of use. It is ideal for micro machining, material processing, biomedical instrumentation, terahertz imaging, semiconductor testing and metrology.



Features

- High average and peak power
- Pulse widths 0.1 ~ 200 ps selectable
- Wavelengths 1030–1070 nm tunable
- Polarization maintaining
- No warm-up time required
- No external RF source required

Optional Upgrades

- Repetition rate stabilizer
- Tunable repetition rate
- Pulse compression
- Phase locking to external RF clock with ultra low jitter
- Synchronization output with customized bandwidth

Distribution in the UK



Lambda Photometrics Ltd, Lambda House, Batford Mill, Harpenden, Hertfordshire AL5 5BZ

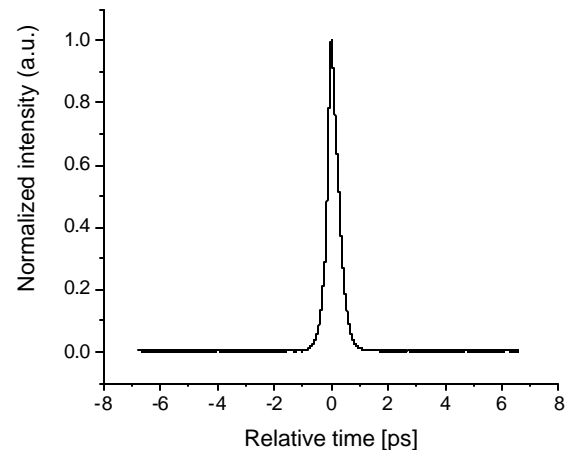
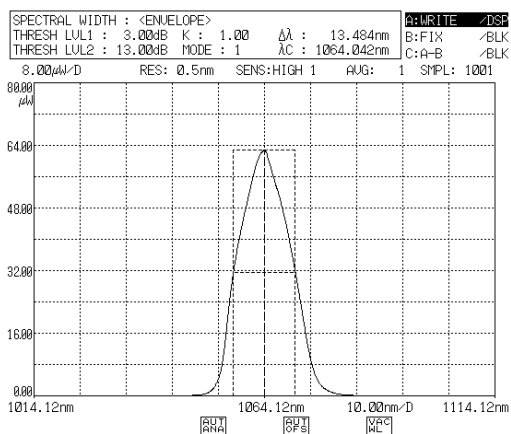
E: info@lambdaphoto.co.uk **W:** www.lambdaphoto.co.uk **T:** +44 (0)1582 764334 **F:** +44 (0)1582 712084

The leading supplier of scientific and industrial lasers, optical systems and associated accessories, fibre optic components and instrumentation, and machine vision products.

Technical Specifications

| Model Number | FPL-03UFF0 | FPL-03UFF1 | FPL-03UFT0 | FPL-03UFT1 |
|------------------------------------|--|----------------------|--|----------------------|
| Pulse width (ps) | >6 | 0.1 ~ 1 (selectable) | > 6 | 0.1 ~ 1 (selectable) |
| Wavelength (nm) | 1030 ~ 1070 (selectable) | | 1040 ~ 1065 (tunable) 1030 ~ 1070 (typical) | |
| Repetition Rate (MHz) | 40 (other repetition rate within 20~100 MHz available) | | | |
| Average Output Power (mW) | 400 (typical) | > 200 | 400 (typical) | > 200 |
| Timing Jitter (fs) | <100 (Carrier offset 100 Hz ~ 1 MHz) | | | |
| Spectral Width (nm) | 30 ~ 40 | | | |
| Termination | Collimated beam in free space | | | |
| Polarization Extinction Ratio (dB) | > 20 | | | |
| Dimension (cm) | 34(w) x 42(d) x 9(h) | | | |
| Operating Temp (°C) | 5 - 40 | | | |
| Operating Voltage (VAC) | 85 - 264 | | | |

Specifications are subject to change without notice. 10/20/2006



Pulsewidth : 270 fs (FWHM)



Safety information: the product complies with FDA radiation performance standards 21 CFR 1040.10 and 1040.11