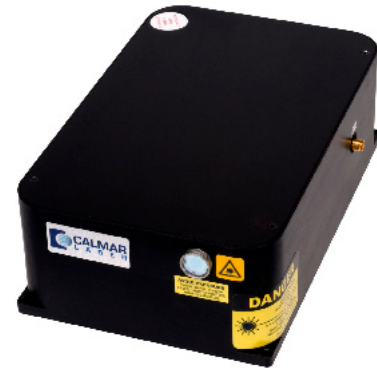


780 nm Femtosecond Fiber Laser With Fiber Output



Applications

- Seeding Ti:sapphire amplifiers
- Biophotonics
- Terahertz radiation
- Materials characterization
- Optical metrology
- Multiphoton imaging microscopy

Features

- Wavelength selectable from 775 to 785 nm
- Average power 4 - 25 mW
- Pulse widths ~ 1.5 ps
- Linearly polarized output
- Minimal pulse pedestal
- Low timing jitter
- RF synchronization output
- Compact and ruggedized OEM package available
- High stability

The 780 nm femtosecond fiber laser is a second harmonic generation (SHG) product of Calmar's passively mode-locked fiber laser in C-band. For fiber output 780 nm laser, the pulse width is 1.5 ps instead of 0.1 ps due to dispersion. The average power can up to 25 mW.

It has excellent stability and reliability. The timing jitter is as low as 60 fs. The repetition rate can be specified from 10 to 50 MHz with a polarization-maintaining (PM) output. An RF synchronization output is provided as a trigger signal.

Calmar's FPL operation is highly stable, which significantly differentiates us from our competitors. Whenever our laser is turned on, it always starts in the same operation state. Calmar's laser enables end users to focus on their work, not on the laser itself, while our competitors' laser startup status is unpredictable, requiring constant adjustment during operation.

Mendocino 780 nm Technical Specifications

| Specifications | Fiber Coupled, Fiber Output |
|-------------------------|--|
| Central Wavelength (nm) | 775 - 785 (selectable) |
| Average Power (mW) | 4 - 25 |
| Pulse Width (ps) * | ~ 1.5 |
| Repetition Rate (MHz) | Typical 30 (10 - 50 available) |
| Spectral Width (nm) | ~ 8 |
| Time Jitter (fs) | ~ 60 (carrier offset 100 Hz - 1 MHz) |
| Optical Output | Fiber coupled, ~ 50 cm fiber pigtail with FC/APC or FC/UPC connector |
| Operating Temp (°C) | 15 - 35 |
| Operating Voltage | Desktop: 85 - 264 VAC Module: 5 VDC |
| Dimensions (cm) | Desktop: 34(w) x 40(d) x 9(h) Module: 18.4(w) x 15.9(d) x 6.5(h) |

* A sech^2 pulse shape (convolution factor of 0.65) is used to determine the pulse width for the second harmonic autocorrelation trace.

Due to our continuous improvement program, specifications are subject to change without notice.

