

O-band Femtosecond Fiber Laser



Applications

- Telecommunication component testing
- Photodetector characterization
- Silicon integrated circuit testing
- Optical metrology
- Materials characterization
- Biophotonics
- Seed source for higher energy laser systems

Features

- Average power > 0.5 mW
- Wavelength of 1310 nm
- Pulse width < 0.3 ps
- Near transform-limited output
- Minimal pulse pedestal
- GHz high repetition rate synchronization signals for low-jitter triggering
- Turnkey operation

The O-band bench top femtosecond fiber laser (FPL) is a passively mode-locked fiber laser that utilizes non-linear wavelength conversion to provide a stable short pulse output at 1.3 μm . With a user-friendly front panel control, this desktop system offers turnkey operation, excellent reliability and the convenience of a fiber-delivered sub 0.3 ps optical pulse. In addition, it provides a 10 GHz electrical synchronization signal for low-jitter triggering in testing high speed photo-detectors and for applications using high speed sampling scopes. It represents the most economical solution for test and measurement applications that require low power, low-jitter, sub-picosecond O-band pulses.

Mendocino 1310 nm Technical Specifications

Model Number	
Average Power (mW)	> 0.5
Repetition Rate ¹ (MHz)	20
Central Wavelength (nm)	~ 1310
Pulse Width ² (ps)	< 0.3
Spectral Width (FWHM, nm)	~ 15
Output Power Stability at 25 °C	< 1% (RMS)
Termination/Output	SMF-28 fiber with FC/APC connector
Operating Voltage	85 - 264 auto ranging
RF Synchronization Output (V)	0.5 (typical), SMA connector
High Harmonic Synchronization Output ³	10 GHz (500 th harmonic of 20 MHz) > 4 dBm, SMA connector
Operating Temperature (°C)	15 - 35
Storage Temperature (°C)	0 - 60
Dimensions (cm)	34(w) x 40(d) x 9(h); desktop

1. For other repetition rates, please contact sales@calmarlaser.com.

2. A sech² pulse shape (deconvolution factor of 0.65) is used to determine the pulse width from the second harmonic autocorrelation trace.

3. For other synchronization output, please contact sales@calmarlaser.com.

Due to our continuous improvement philosophy, all product specifications are subject to change without prior notice. Please contact sales@calmarlaser.com for customized specifications.

