Picosecond Narrow Bandwidth Fiber Laser

- Passive Mode-locking

Applications

- Amplifier seeding
- Materials characterization
- Diagnostics in biology and medicine
- Optical sampling
- Lidar

Features

- Narrow spectral bandwidth of 0.4 nm typical
- Wavelength selectable over 1 μm band
- Pulse widths 5 ~ 20 ps
- Average output power greater than 100 mW
- Linearly polarized output
- Transform-limited output
- Low timing jitter
- Minimal pulse pedestal

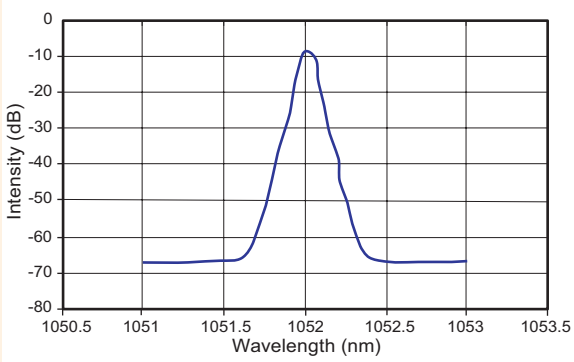
The 1 μm band picosecond ultrafast fiber laser is a passively mode-locked fiber laser that utilizes saturable absorbers to deliver narrow spectral bandwidth of typical 0.2 nm. The laser has excellent stability and reliability with turnkey operation. The wavelength is factory selectable throughout 1 μm band. The pulse width can be 5 ~ 20 ps with near transform-limited pulse shape and a better than -20 dB pedestal. The timing jitter is as low as 100 fs. The repetition rate can be specified from 10 to 100 MHz with either a polarization-maintaining (PM) or non-PM fiber output. With 5 ~ 100 mW output power, the picosecond laser is an ideal narrow bandwidth source for seeding applications. An RF synchronization output is provided as a trigger signal.

Technical Specifications

Model Number	FPLNB-02UFF
Pulse Width (ps)	5 ~ 20
Output Wavelength (nm)*	1030 ~ 1064 (selectable)
Output Spectral Bandwidth (nm)	< 0.5
Repetition Rate (MHz)	30
Output Power (mW)	5 ~ 100
Operating Temp (°C)	17 ~ 35
Operating Voltage (VAC)	85 ~ 264
Dimensions (cm)	34(w) x 40(d) x 9(h) benchtop or 18.5(w) x 12.7(d) x 6.5(h) module

* *780 nm band is available.*

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



Typical Autocorrelation Trace.
Pulse Width of 20 ps

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