

# Picosecond Mode-Locked Fiber Lasers

MLFL-Series



MPB's line of picosecond passively Mode-Locked Fiber Lasers (MLFL) are designed to address a range of market applications including semi-conductor inspection, micro-machining, metrology, multi-photon spectroscopy, and can be used as a seed source for optical amplifiers, and second harmonic generation.

Based on an all-fiber design, the MLFL is highly reliable (10,000 hrs) and maintenance-free. To ensure an environmentally-stable linearly-polarized output and turnkey self-start operation, all components are made of polarization-maintaining fiber.

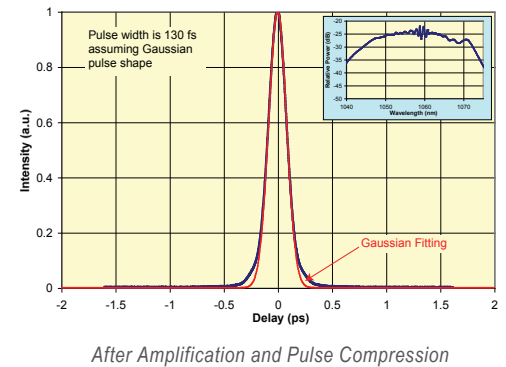
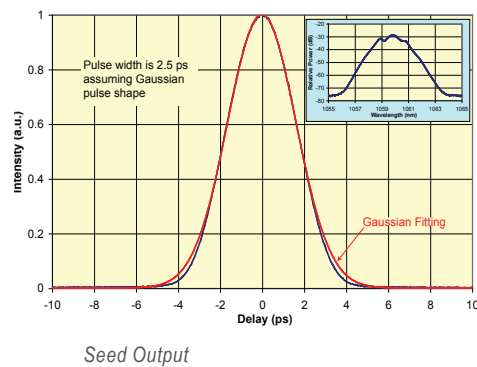
## Features

- Self-starting
- Low amplitude noise
- Spectrally transform-limited pulse widths without CW light content
- Linearly-polarized, environmentally-stable output
- Compact
- Low power consumption

## Applications

- Biomedical and Chemistry  
(multi-photon microscopy, ultra-fast spectroscopy)
- Micro-Machining  
(semiconductor wafer and transparent materials processing)
- Tera-Hertz Generation  
(material defect imaging, security)
- Time Response Characterization
- High-Speed Optical Sampling
- Metrology

## Autocorrelation Trace and Emission Spectra of Ytterbium-doped Mode Locked Fiber Laser



## SPECIFICATIONS

MPB's picosecond Mode-Locked Fiber Lasers are available with customized specifications within the following range:

Emission Wavelength	1020 - 1100	nm
Pulse Duration	2 to 50	ps
Average Output Power with preamplifier	2 to 20	mW
with booster	150 3000	
Repetition Rate	30 to 100	MHz
Polarization	Linear	

## OTHER SPECIFICATIONS

Benchtop Unit (L x W x H)	169.5 x 354 x 62	mm
Block Unit	200 x 130 x 28.5	mm