

# FEMTOSECOND FIBER LASERS

## Applications

- Nonlinear optics
- Optical-parametric-oscillator (OPO) pumping
- Supercontinuum generation
- Quantum communications
- Optical sampling

- **>10 kW of peak power**
- **<100-fs pulse duration**
- **\$26,000**



These robust turn-key femtosecond fiber lasers offer exceptional performance for a variety of applications from nonlinear optics to quantum communications. With a base price of \$26,000, they offer the best in performance for the price: the shortest pulse durations (<100 fs), the highest output powers (>10 kW peak), and low timing jitter of less than 150 fs (100 Hz to 10 MHz). A unique all-fiber-integrated solution composed of robust telecommunication components and a state-of-the-art dispersion management scheme enables nearly transform-limited pulses and stable turn-key performance. Available options include: additional output at 780 nm, supercontinuum generation from 1200-2000 nm, synchronization to external clocks, and low-cost version with >6 mW of output power and <250-fs pulse durations.

- **Central wavelength at 1560 nm**
- **Superior value with >40 mW and <100 fs starting at \$26,000**
- **Low-cost version with >6 mW and <250 fs**

## Preliminary Specifications

### KEY FEATURES

<b>Central Wavelength Range (fixed)</b> 1560±10 nm	<b>Output Power</b> >40 mW
<b>Repetition Rate</b> 40±10 MHz	<b>Peak Output Power</b> >10 kW
<b>Pulse Width</b> <100 fs	<b>RMS Timing Jitter</b> <150 fs (over 100 Hz to 10 MHz)
<b>Spectral Width</b> >24 nm	<b>Dimensions:</b> 19" rack 2U Turnkey operation

### OPTIONS

- Low-cost version (contact us for price)
- Output at 1560 & 780 nm
- Supercontinuum from 1200-2000 nm
- Synchronization to external clocks

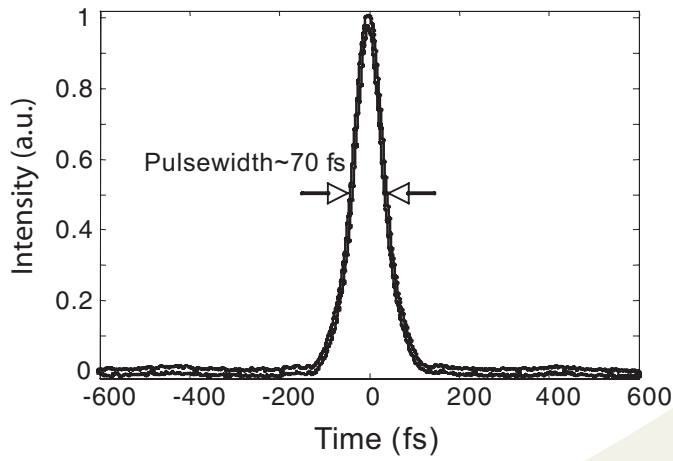
BASE PRICE: \$26,000.

## Typical Autocorrelation Trace & Optical Spectrum

### LASER DATA SHOWN BELOW

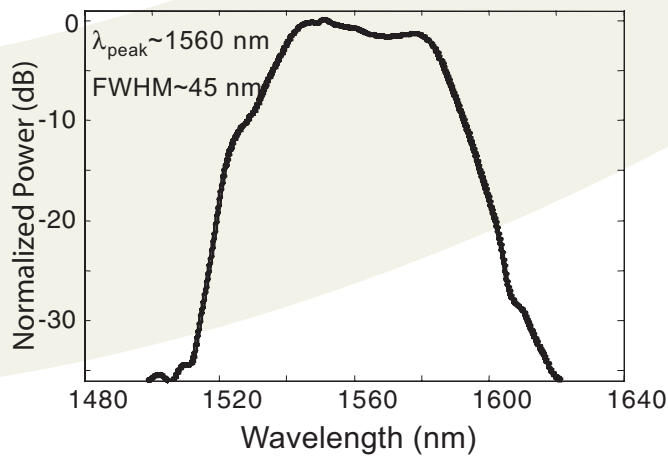
Central Wavelength: 1560 nm  
Pulse Width: 70 fs  
Spectral Width: >45 nm  
Output Power: >40 mW

### Autocorrelation Trace



- Clean ultrafast pulses for time-domain applications
- High-peak powers—ideal for nonlinear optics
- Minimal pedestal

### Optical Spectrum



- Wide spectral bandwidth for OCT applications
- Ideal for component testing
- Supercontinuum generation from 1200–2000 nm available