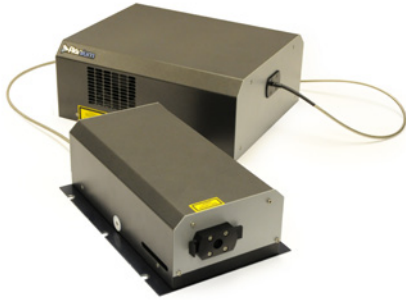


# FemtoPower **FP1060** & **FP532**

High-power ultrafast fiber lasers

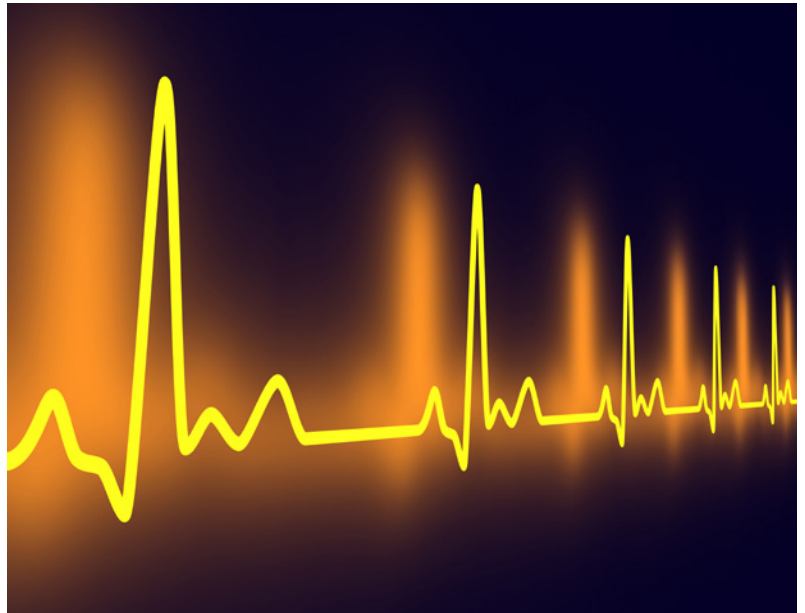


## Key Features

- Up to 20W average output power
- 1064nm or 532nm
- Picosecond pulse-widths
- Narrow bandwidth, low noise
- Small foot-print
- Maintenance-free

## Applications

- Medical and Industrial Imaging
- OPO pumping
- Metrology
- Harmonic generation
- Fundamental study



## High power picosecond fiber lasers

The **FP1060** series is a high power ultrafast fiber laser based on an inherently robust self-starting picosecond fiber laser oscillator and high-power low noise fiber amplifier. The **FP532** version adds fully integrated high-efficiency second harmonic generation.

Designed for the most demanding scientific and industrial applications, the laser delivers high average powers while maintaining exceptional beam quality, narrow bandwidth and short pulse duration.

### Flexible

Laser delivery is from a passively-cooled compact remote head which includes the beam delivery optics, optical isolation and optional frequency conversion.

### Reliable

The lasers utilise an inherently robust all-fiber design allowing for unprecedented levels of reliability from an ultrafast laser. In addition, the systems are easy to use, maintenance-free, air-cooled and require no alignment.

## Standard Specifications

Model	1064nm High-power Ultrafast Laser			532nm High-power Ultrafast Laser	
	FP1060-0.1	FP1060-10	FP1060-20	FP532-1	FP532-5
Central Wavelength	1064nm	1064nm	1064nm	532nm	532nm
Average Power	>100mW	>10W	>20W	>1W	>5W
Pulse Width	<15ps	<15ps	<20ps	<20ps	<20ps
Repetition Rate	100MHz	100MHz	100MHz	40MHz	100MHz
Bandwidth	<0.5nm	<1nm	<1nm	<1nm	<1nm
Amplitude Noise (RMS)	<±2%	<±2%	<±2%	<±2%	<±2%
M-squared	<1.2	<1.2	<1.2	<1.2	<1.2
Output Optic	Collimated	Collimated	Collimated	Collimated	Collimated
Output Polarization	Linear	Linear	Linear	Linear	Linear
Power consumption (max)	Air-cooled	Air-cooled	Air-cooled	Air-cooled	Air-cooled
Dimensions (WxLxH, mm)					
Laser Chassis	300 x 250 x 120	300 x 250 x 120	400 x 250 x 120	300 x 250 x 120	300 x 250 x 120
Remote Optical Head	N/A	180 x 270 x 100	180 x 270 x 100	220 x 360 x 130	220 x 360 x 130
Weight	<15kg	<20kg	<25kg	<25kg	<25kg

## Custom Options:

- Alternative wavelengths: **980nm, 1030nm, 1045nm** & **1053nm** (plus harmonics)
- Custom pulse duration: **3ps** to **100ps**
- Femtosecond version (-fs series)
- Fixed repetition rates from **20MHz** to **100MHz**
- Variable repetition rates **100kHz** to **20MHz**
- Wider bandwidth



**VISIBLE AND INVISIBLE  
LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR SCATTERED RADIATION  
CLASS 4 LASER PRODUCT**

**CAUTION: THIS IS A CLASS 4 LASER PRODUCT AND USE OF CONTROLS AND ADJUSTMENTS OTHER THAN THOSE SPECIFIED IN THE PRODUCT MANUAL MAY RESULT IN HAZARDOUS LASER RADIATION EXPOSURE**

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