Femtosecond Fiber Laser

LIGHTWIRE FF3000 SERIES



For the applications where power or pulse energy of the standard femtosecond oscillators is not enough but high repetition rate is desired, LightWire FF3000 series laser provides optimal solution. Higher pulse energy can give your non-linear experiments a required boost to achieve better signal to noise ratio. The laser comes with pulse duration and dispersion pre-compensation adjustment for the precisely tailored femtosecond pulses at your sample.

FEATURES

- Up to 3 W output power
- <250 fs pulse duration
- M² < 1.3 beam quality
- 1064 nm central wavelength
- Low maintenance

APPLICATIONS

- Ultrafast spectroscopy
- Time domain terahertz spectroscopy
- Nonlinear microscopy
- Photopolimerization
- Pumping of femtosecond parametric systems

SPECIFICATIONS

Model	LightWire FF3000
Central wavelength	1064 nm
Compressed pulse duration	<250 fs
Pulse duration adjustment	250 fs – 1 ps
Output power	>3 W
Pulse energy	70 nJ
Dispersion pre-compensation	variable in a range ± 140000 fs ²
Optical output	collimated beam
Pulse repetition rate	40 MHz ¹⁾
Beam quality	M ² < 1.3
Pulse train monitoring	electrical SMA connector
Synchronization	TTL signal with low jitter (<20 ps)
Dimensions (D×W×H)	364×271×192 mm (laser head); 250×200×192 mm (compressor)
Weight	<10 kg (laser head); <5 kg (compressor)
Power supply	100-240 V, 50-60 Hz AC
Operating conditions	10-40 °C, humidity – not condensing

¹⁾ Other repetition rates are available on request

