

## Pulsed Fiber Laser Series, 1550nm Customized for single-shot operation



**Model no.: PFL-LF-1550**

### Description

This Pulsed Fiber Laser generates single frequency short nanosecond pulses at 1550 nm. It is based on a MOPA (Master Oscillator Power Amplifier) architecture that uses proven subsystems and proprietary laser pulse generation, triggering, gating and ASE suppression technologies. The laser incorporates real-time stabilization, monitoring and control electronics and firmware that continuously monitor and optimize laser operation. This customized PFL-LF-1550 is designed for very low repetition frequency operation.

### Optical parameters (at 25°C)

Parameter	Specification	Unit
Center wavelength	In range 1545 – 1555	nm
Center wavelength stability	< 0.05	nm
Spectral width (FWHM)	< 0.5	nm
Pulse width (FWHM) - fixed	< 5	ns
Pulse repetition frequency	single-shot to 100	Hz
Peak power <sup>1</sup>	> 5	kW
Pulse energy <sup>1</sup>	> 20	μJ
Average signal to ASE ratio	> 15	dB
Output polarization	Random	dB
Trigger rising edge to pulse delay	100 – 500	μs
Trigger rising edge to pulse jitter	< 1 *	ns

\* with external delayed trigger signal (~300μs)

### Optical connections

Output fiber	SMF-28 or equivalent (in 3mm Kevlar optical fiber cable)
Fiber delivery length	30cm
Fiber termination	FC/APC with attached output beam collimator (1/e <sup>2</sup> =1.6mm, f=8.18mm)

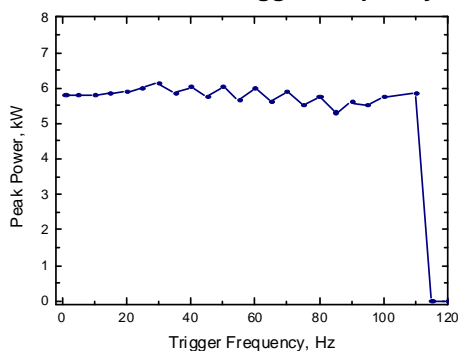
### Electrical parameters

Parameter	Specification	Unit
Power supply	+5 and +15	V

### Mechanical specifications

Parameter	Specification	Unit
Dimensions (WxDxH)	205 x 255 x 48	mm

**Peak Power vs. Trigger Frequency**



**Typical output optical pulse**

