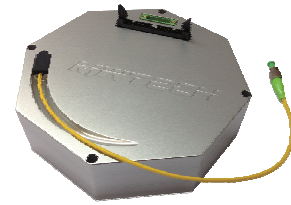


compact Pulsed Fiber Laser Series Single frequency at 1550nm



Model no.: cPFL-1550

Description

This compact Pulsed Fiber Laser developed for field applications, 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 techniques. The laser incorporates real-time stabilization, control electronics and firmware that continuously monitor and optimize laser 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	20 - 150	kHz
Peak power ¹	> 5	kW
Pulse energy ¹	> 20	μJ
Rated average power	> 1	W
Average signal to ASE ratio	> 20	dB
Output polarization	Random	-
Trigger rising edge to pulse delay	< 1	μs
Trigger rising edge to pulse jitter	< 1	ns

¹ trigger input frequency of 20kHz

Optical connections

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

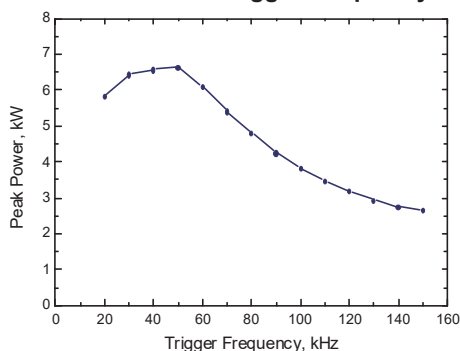
Electrical parameters

Parameter	Specification	Unit
Power supply	+5 and +12	V

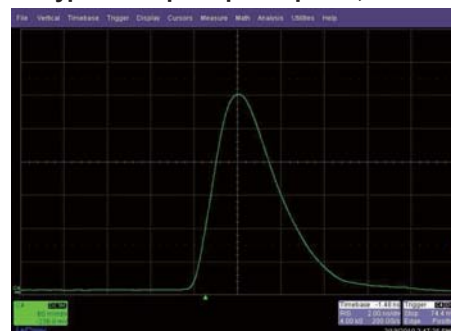
Mechanical specifications

Parameter	Specification	Unit
Dimensions (WxDxH)	160 x 160 x 35	mm

Peak Power vs. Trigger Frequency



Typical output optical pulse, 3.5ns



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