PULSED FIBER LASER SERIES
Single frequency at 1550nm

Release: V1.0 | Author: MM | Date: 12/05/2016

MODEL NO

PFL-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 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 (in 3mm Kevlar optical fiber cable)
Fiber delivery length	30cm
Fiber termination	FC/APC with attached output beam collimator (1/e2=1.6mm, f=8.18mm)

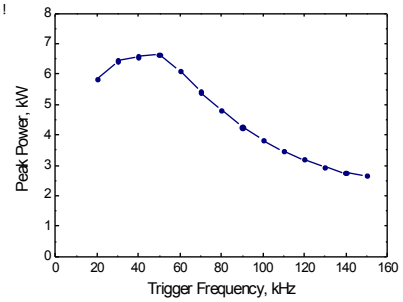
ELECTRICAL PARAMETERS

Parameter	Specification	Unit
Power supply	+5 and +15	V

MECHANICAL PARAMETERS

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

PEAK POWER VS. TRIGGER FREQUENCY



TYPICAL OUTPUT OPTICAL PULSE