

Pulsed Fiber Laser Series, High Power at 1064nm with unique real-time controllability

Model no.: PFL-1064-R-20



Description

This Pulsed Fiber Laser generates nanosecond pulses at 1064nm. It is based on a MOPA (Master Oscillator Power Amplifier) architecture that uses novel real time processing controls with proven subsystems and proprietary laser pulse generation, triggering and ASE suppression techniques. The laser incorporates unique real-time stabilization, control electronics and firmware that continuously monitor and optimize laser operation.

Optical parameters (at 25°C)

Parameter	Specification	Unit
Center wavelength (with active stabilization)	1064 ±4	nm
Pulse width range	10 – 200	ns
Pulse repetition frequency	Single-shot to 1MHz	-
Maximum pulse energy	0.8	mJ
Peak power	> 10	kW
Output average power up to	20	W
Beam propagation factor (M ²)	< 1.5	-
Output polarization	Random	-

Delivery cable and output beam specifications

Cable type	9.5 mm Stainless Steel Jacket
Cable length	2 m
Beam divergence	< 4 mrad
Beam diameter	0.5 – 0.7 mm

Electrical parameters (at 25°C)

Parameter	Specification	Unit
Laser Power supply	+5 to +12 VDC / 10A max.	-
Fan module	+12V, 1A	W

Mechanical and environmental specifications

Parameter	Specification	Unit
Operating case temperature	+5 to +55	C
Storage temperature	-10 to +60	C
Humidity	0 - 95, Non-condensing	%
Dimensions (WxDxH)	205 x 255 x 95 (without fan module attached)	mm