

2 Micron Fiber Laser Series

Small, air-cooled form factor with QCW power up to 650W.



nLIGHT® 2 μm series Continuous Wave (CW) and Quasi-Continuous Wave (QCW) fiber lasers deliver CW power up to 100 W and QCW pulsed power up to 625 W from a compact, air cooled, 48 V DC powered package. These highly reliable and energy efficient lasers operate at 1940nm wavelength and provides up to 7J of energy for your most demanding applications. Options include a high-power multi-mode output or a medium power single mode output, ideal for a diverse set of medical, industrial, scientific, aerospace and defense applications.

Features

- 60W to 100W CW models provide power level and pulse energy options to support a range of applications.
- Customizable interface location and fiber length for ease of system integration.
- 625W of peak power & pulse widths as short as 50 μs
- Equipped with air cooled package, eliminating need for a water chiller.

nLIGHT 2 μm CW and QCW Fiber Laser Specifications

Models	TFL-60		TFL-100
Optical Specifications			
Mode of Operation	CW / QCW		
Polarization	Random		
Maximum Peak Power	625 W		
Maximum CW Power	60 W	100 W	
Power Tunability	3 – 100%		
Modulation Frequency	≤ 10 kHz		
Rise and Fall Times	≤ 10 μs		
Maximum Pulse Energy	7 J		
Output Beam	Single mode, 22 μm MFD	Multi-mode, 75 μm core	
Beam Quality	<1.3	<5	
Wavelength	1940 ± 10 nm		
Electrical Specifications			
Operating Voltage, DC	48 V		
Control Interface	External hardware		
Mechanical Specifications			
Dimensions	540 x 481 x 179 mm		
Optical Fiber	0.9 m, FC/A connector		
Cooling Method	Air		
Environmental Specifications			
Operating Temperature	+15 to +30°C		
Storage Temperature	-10 to +60°C		
Relative Humidity	10 to 80%		