

1550nm High-power nanosecond pulsed fiber laser

SINGLE-FREQUENCY & NANOSECOND LASERS



The 1550nm high-power nanosecond pulsed fiber laser employs a high-power gain fiber module, complemented by specialized driver and temperature control circuits, to output high-peak and high-energy laser pulses with stable laser wavelength and power. It can be utilized in laser ranging radars, fiber-optic sensing systems, and other applications.

- All-fiber structure
- Lidar
- Pulse Duration / Freq / Power Adjustable
- Nonlinear Optics
- Pulse energy up to 100uJ
- Fiber optic distributed sensing

Specifications

Parameter	Specification
Wavelength (nm)	1550
Wavelength Accuracy (nm)	± 1
Maximum pulse energy (μJ)	100
Maximum peak power (k W)	10
Maximum average power (W)	2
Pulse Duration (ns)	1 ~ 200 Adjustable
Repetition Rate (kHz)	1~ 3000 Adjustable
M 2	≤1.1
Output Isolation (dB)	≥30
Short-term stability (15 minutes) (dB)	≤ ±0.05
Long-term stability (8 hours) (dB)	≤ ±0.1
Polarization	Random
Optical Fiber	SMF-28, 900um Tube
Fiber Connectors	FC/APC , Length ≥ 0.3m

- * Maximum pulse energy: @ Repetition Rate ≤ 10kHz, Pulse Duration ≥ 10ns
- * Maximum peak power: @ Pulse Duration ≥ 3ns, Repetition Rate ≤ 10kHz
- * Maximum average power: @ Pulse Duration ≥ 3ns, Repetition Rate ≥ 100kHz
- * Pulse Duration: * 1~3ns @ FWHM, >3ns @ Full width at the Base
- * M 2: Based on the collimator
- * Short-term stability (15 minutes): ≤ ± 1.2 %
- * Long-term stability (8 hours): ≤ ± 2 %

Source: WaveQuanta product database. For ordering, customization (wavelength, power, package) and quotation, contact sales@wavequanta.com.