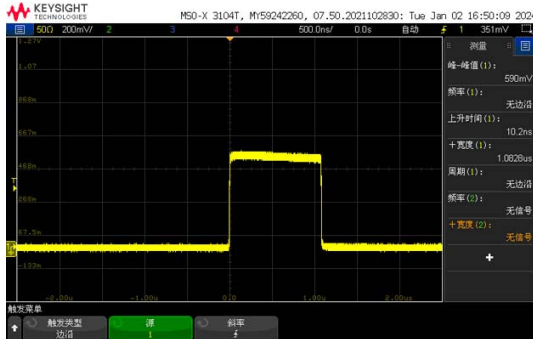


# Single-frequency narrow linewidth nanosecond pulsed fiber laser

## SINGLE-FREQUENCY & NANOSECOND LASERS



The laser uses a single-frequency narrow linewidth laser as the seed source and cooperates with a high-power gain fiber module to output single-frequency narrow linewidth laser pulses with high peak value and high energy. The laser wavelength and power are stable, and can be used for coherent lidar, optical fiber sensing systems, etc.

### Specifications

Parameter	Specification
Center wavelength (nm)	1550± 1
Spectral linewidth (kHz)	≤3/≤100
Maximum single pulse energy (μJ)	10
Maximum output peak power (W)	≥50
Maximum average laser power (mW)	100~200
Pulse width (ns)	20~1000
Repetition frequency (kHz)	1 ~ 200
Pulse turn-off ratio (dB)	≥60
Beam quality M 2	≤1.1
Output isolation (dB)	≥30
Short-term stability (15 minutes) (dB)	≤ ±0.02
Long-term stability (8 hours) (dB)	≤ ±0.05
Output laser polarization state	random/Line deviation
Pigtail type	SMF-28/PM1550
Fiber pigtail joint type	FC/APC or fiber collimator

- \* Maximum single pulse energy: @ Pulse frequency =20kHz, pulse width =200ns
- \* Maximum output peak power: 50W peak @ Pulse frequency =20kHz, pulse width =200ns
- \* Maximum average laser power: @ Pulse energy = 10uJ, pulse frequency =10 to 20kHz
- \* Pulse width: \* Refers to the full width at the bottom of the pulse, adjustable
- \* repetition frequency: Adjustable
- \* beam quality M 2: @ When cooperating with the output of the optical fiber collimator
- \* short-term stability (15 minutes): equivalent ≤± 0.5 %
- \* long-term stability (8 hours): equivalent ≤± 1.2 %
- \* pigtail type: 900um casing, length 0.3 m

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