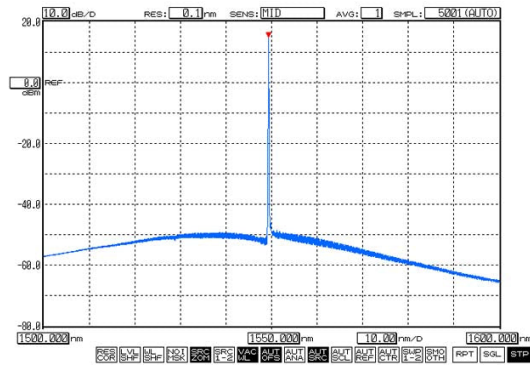


# Single-frequency narrow linewidth semiconductor laser

## SINGLE-FREQUENCY & NANOSECOND LASERS



The single-frequency narrow linewidth fiber laser uses an ultra-narrow linewidth external cavity semiconductor laser chip to output a single longitudinal mode laser with a wavelength of 1550nm, with a spectral linewidth of less than 100kHz, and a single-mode or polarization maintaining fiber coupled output. It is provided in a module or desktop package. It is a cost-effective laser source that can be used for distributed sensing.

### Specifications

Parameter	Specification
Operating wavelength (nm)	1550± 1
Spectral linewidth @3dB (kHz)	≤ 100
Side mode rejection ratio (dB)	≥50
Wavelength instability (MHz)	≤± 100
Working mode	CW
Output power (mW)	30
Short-term stability (15 minutes) (dB)	≤ ±0.02
Long-term stability (8 hours) (dB)	≤ ±0.05
Polarization state	linear polarization
Pigtail type	PM1550

\* spectral linewidth @3dB: \*3dB line width = 20dB line width/20

\* wavelength instability: @8h

\* working mode: continuous light

\* short-term stability (15 minutes): equivalent  $\leq \pm 0.5\%$

\* long-term stability (8 hours): equivalent  $\leq \pm 1.2\%$

\* pigtail type: FC/APC

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