

High Power Low Noise Laser – 1550nm

Key Features

- Output power 100, 150 or 200mW
- Center wavelength in range 1530-1565 nm
- Low Frequency RIN peak eliminated with patented technology
- Noise @ 100kHz - 100MHz : <-140dBc/Hz, @ >100MHz : <-165dBc/Hz (Shot noise limit)
- Narrow linewidth: <6kHz
- Good Wavelength stability (+/- 1GHz); with additional Princeton Optronics ultra stable wave locker, stability is +/- 5KHz over 30 mins.



Applications

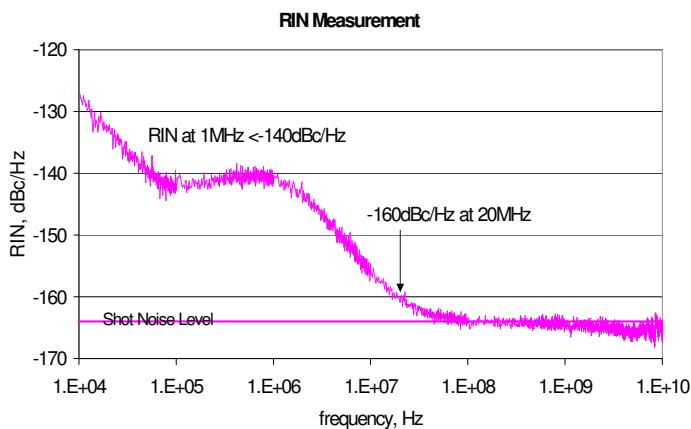
- LIDAR
- RF Links
- Sensing
- Coherent Communication
- Test & Measurement

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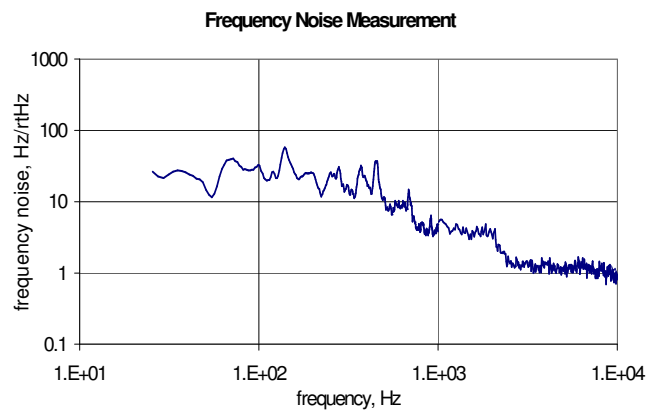
Product Specifications

Temperature: 25°C

Parameter	Value
Wavelength range	1530 – 1560nm
Output Power	100, 150, 200mW
Wavelength Stability	+/- 0.5GHz
Wavelength Accuracy	50MHz
Tuning Range (Piezo)	20GHz
RIN (100KHz to 100MHz)	< -140dB/Hz
RIN (>100MHz)	< -165dB/Hz or shot noise limited
Line width	< 6kHz
Frequency Noise	<100Hz/rt-Hz 10 – 1kHz <10Hz/rt-Hz >1kHz
Side Mode Suppression Ratio (SMSR)	> 70dB
Power Stability	+/- 0.25dB
Connectors	FC/APC
Fiber pigtail	PM fiber, 1m long
Package Dimensions	2.4" X 3.25" X 0.5"



RIN measurement plot



Frequency noise measurement plot

Notes.

1. Laser polarization aligned to slow axis of the fiber.
2. Performance dependent on the module electronics
3. Wavelength stability at constant temperature after acquisition.

Fiber Type: Fujikura Panda PMF with 900 micron Hytrel jacket

Fiber Length: 1.0 – 1.1 m

Termination: FC/APC (angled) connector