

The OEwaves' HI-Q® OE4001 Relative Intensity Noise (RIN) Analyzer offers a fully automated measurement of ultra-low RIN CW laser sources.



HI-Q® RIN Analyzer provides turn-key automatic and rapid relative intensity noise spectrum measurements.

This complete system is unique in wideband measurement and operates with ease, speed and precision via a simple PC-based graphic user interface and API. No additional test equipment required. The unmatched ultra-low relative intensity noise analyzer is scalable to various input wavelength bands and is available with multiple frequency range options. This system is ideal for manufacturing and research environments.

FEATURES

- Ultra-Low Relative Intensity Noise Measurement
- Fast Real-Time Measurement
- User Friendly Interface
- Simple PC-based Operation
- Remote Command API
- 19 – 22" Rack System

OPTIONAL CONFIGURATION

- Multiple Input Wavelength Bands within 740 nm – 2150 nm
- Ultra-Low Noise Floor
- Extended Frequency Ranges up to 110 GHz
- Excess RIN Measurement
- Extended Input Power Range
- Range Options and Upgrades

HI-Q® RELATIVE INTENSITY NOISE ANALYZER

OE4001



SPECIFICATIONS

1530 – 1565 nm

RIN System Floors ¹	-156 ± 2 dB/Hz -161 ± 2 dB/Hz -166 ± 2 dB/Hz	Total RIN Option; Ultra-low total RIN Option; Excess RIN
Optical Input Power Range	+0 to +10 dBm	SM-FC/APC (other type available)
Offset Frequency Range	100 MHz – Up to 110 GHz (Option)	1 Hz – 100 MHz available in OE4000
Measurement Types	Total RIN Excess RIN (Option) Cross-Correlation (Option)	Conventional measurement Factors out shot and thermal noise ≤ 40GHz Models only
Operating Interface	Monitor/Keyboard/Mouse (User supplied) via HDMI/USB from Internal Controller; OR via LAN/VPN using Command API or PC (User supplied WIN11 PRO+) Remote Desktop; OR Factory supplied PC Laptop w/pre-installed drivers/app (Option)	
Operating Temperature Range	15 °C to 35 °C	
Power	110/120 or 220/240 V _{ac} ; 50/60 Hz	
Size	1U x 19" Rack Mount (Larger for >40 GHz options)	

OPTIONS

Low and Extended Input Power Range ¹	Up to 15 dB range no less than -10 dBm AND no higher than +10 dBm	
Wavelength Ranges Available ²	740 – 935 / 965 – 1065 / 1000 – 1100 / 1260 – 1360 / 1360 – 1460 / 1460 – 1530 / 1530 – 1565 / 1565 – 1625 / 1647 – 1655 / 1950 – 2150 (nm) (Consult factory for custom/multi-wavelength range options; Frequency range dependent)	
Cross-Correlation Configuration	Lower System Noise Floor by >10 dB (AVG setting, Offset frequency, and LUT shot noise dependent); ≤ 40 GHz only	
Phase / Frequency Noise	Consult Factory (ask us about OE4000)	

Note: These specifications are subject to change without notice due to OEwaves commitment to continuous product improvement. . Patents Pending.

Note: Unless otherwise noted, noise floor is optimum at maximum specified input power range.

¹Consult OEwaves Sales for custom RIN floor and low power option performance.

²Noise floor may be wavelength band dependent.



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RIDE THE WAVE OF INNOVATION

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