



HR4Pro High-resolution Spectrometers

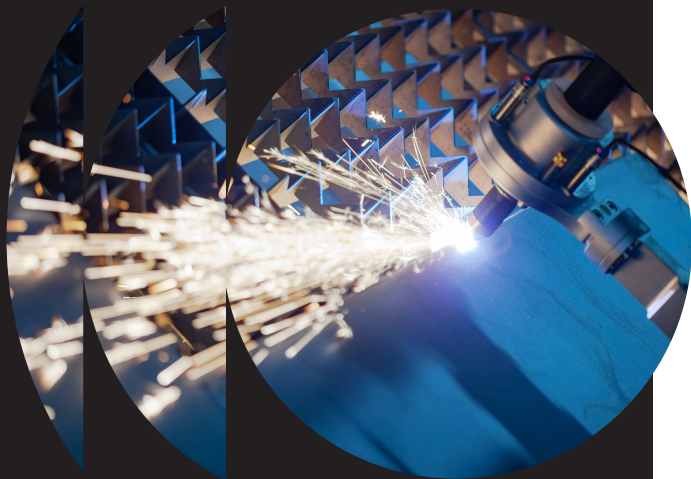
GMP

GENERAL
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High Resolution, Great Thermal Stability

HR4Pro spectrometers are compact, high-resolution spectrometers distinguished by low stray light performance and great thermal stability for applications in lab, field and process environments. With a robust optical bench design and optimized components, the HR4Pro provides up to 10x improvement in thermal stability compared with similar small-bench spectrometers. Preconfigured HR4Pro models are available for UV-Vis (200-875 nm), Vis-NIR (350-1025 nm) and extended-range (200-1100 nm) measurements.



At a Glance

Wavelength range: Preconfigured options within 200-1100 nm

Optical resolution: <1.0 nm (FWHM)

Entrance aperture: 10 µm standard; replaceable slits available

Order-sorting filter: Yes

Detector collection lens: Yes

Integration time: 3.8 ms-10 s

SNR: 300:1

Dark noise: 6 counts RMS

Corrected linearity: 0.5% (NL)

Input fiber connector: SMA 905



Advantages of HR4Pro Spectrometers

HR4Pro spectrometers comprise an attractive combination of small bench size, sub-nanometer optical resolution (FWHM) performance, and thermal stability-driven spectral accuracy for applications in challenging environments. Consider:

Benefits for Researchers	Benefits for Industrial Engineers and Integrators
Preconfigured units make model selection simple	Off-the-shelf options across UV-NIR wavelengths for initial testing
Low stray light ensures reliable results	10x thermal stability improvement vs. comparable spectrometers
Large-bench optical resolution performance at small-bench pricing	Excellent optical resolution in a unit ideal for integrating into other devices
Supported by in-house expertise across thousands of applications	Availability of our Lab Services team for project feasibility and consultation

HR4Pro Preconfigured Spectrometers

HR4Pro model:	HR4Pro UV-Vis-ES	HR4Pro Vis-NIR-ES	HR4Pro XR-ES
Wavelength range:	200-875 nm	350-1025 nm	200-1100 nm
Optical resolution (FWHM):	<0.7 nm	<0.7 nm	~0.9 nm
Thermal stability:	0.3 pixels/° C	0.5 pixels/° C	0.6 pixels/° C
Example applications:	UV laser characterization; plasma gases analysis	Detection of atomic emission lines; LED characterization; flame analysis	Upwelling/downwelling measurements; thin film and solar panel analysis