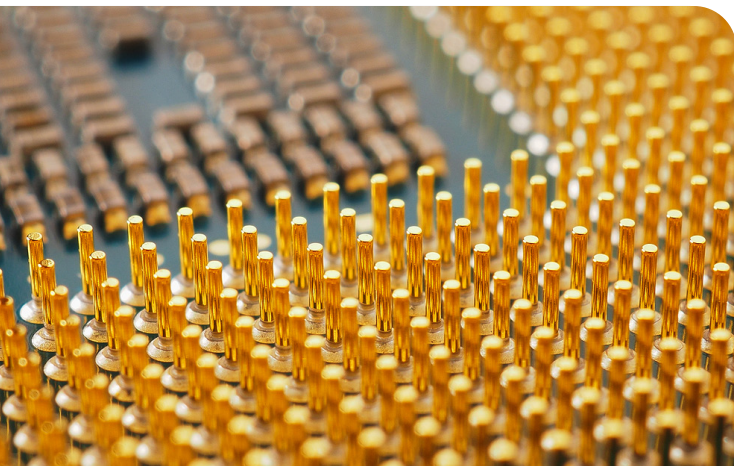# QE *Pro* Spectrometers

Robust Optical Design for Great Spectral Performance

The QE *Pro* is a versatile, high-sensitivity spectrometer ideal for general-purpose and low light level applications such as fluorescence and Raman analysis. The spectrometer has a back-thinned CCD detector with high quantum efficiency and onboard spectral buffering to ensure data integrity at high collection rates. An optional internal shutter is available for effective management of dark measurements, and the interchangeable slit design allows users to switch between measurements easily. Both customized and preconfigured QE *Pro* models are available.

High Performance, Great Flexibility

QE *Pro* has low-noise electronics and delivers great sensitivity for all sorts of applications. Users can select from these options or choose a preconfigured model for Raman applications. Setups are available using Raman excitation lasers ranging from 532 nm to 1064 nm.

QE *PRO* SPECTROMETER MODELS

QE *Pro* model:	QE *Pro* UV-Vis	QE *Pro* Vis-NIR	QE *Pro* XR
Wavelength range:	200-775 nm	350-925 nm	200-950 nm
Entrance aperture:	10 µm	10 µm	10 µm
Optical resolution (FWHM):	~1.2 nm	~1.2 nm	~1.6 nm
Order-sorting filter:	Yes	Yes	Yes
Best for:	General-purpose and low light applications	General-purpose and low light applications	High sensitivity over wide range
Example applications:	Fluorescence of proteins, dyes, biological samples	Specular and diffuse reflectance of materials	Solar irradiance measure-ments; blood and tissue analysis

At a Glance

Wavelength range: ~185-1100 nm

(configurations available within this range)

Optical resolution (w/10 µm slit):

1.20-1.60 nm (FWHM) (preconfigured models)

Integration time: 8 ms-60 minutes

Dynamic range: 85000:1 (single scan)

Signal to Noise Ratio (single scan): 1000:1

Buffering: stores up to 15,000 spectra

Interfaces: USB; SMA 905; RS-232

TEC: -40 °C to 50 °C

Temperature (storage): -30 °C to 70 °C

Temperature (operation): 0 °C to 55 °C

Dimensions: 182 mm x 110 mm x 47 mm

Weight: 1.15 kg