gekko photonics

Spectrally X1 PORTABLE

- Rapid identification and verification workflows
- Field and at-line chemical analysis
- Built-in chemometric models and spectral libraries

Parameter	Value
Measurement principle	Raman spectroscopy
Laser wavelength	785 nm
Spectral range	300–1650 cm^{-1}
Laser power	600 mW
Detector type	TE-cooled back-thinned CCD array
Acquisition time	5–300 s
Integration time	0.01–300 s
CCD camera cooling	Proprietary TEC driver with cooling module
Laser lifetime	Min. 2 years
Automatic calibration	Reference integrated in probe
Signal-to-noise ratio (SNR)	547
Warm-up time	30 min
Operating temperature	0–45 °C
Storage temperature	–15 to +40 °C
Permissible relative humidity	20–70% RH (non-condensing)
Supply voltage	230 V AC, 50/60 Hz, with protective earth
Laser wavelength stability	0.01 nm/°C
Power consumption	200 W
Operator panel (HMI)	Touchscreen display
IP protection rating	IP54

BRINGING RAMAN ANALYSIS TO THE SAMPLE

The Spectrally X1 PORTABLE Raman analyzer combines high-performance Raman spectroscopy with a fully integrated design for rapid chemical identification and quantification. Equipped with a high-efficiency CCD detector with thermoelectric cooling and optimized optical throughput, the system delivers Raman spectra with an excellent signal-to-noise ratio and high measurement stability.

With wide spectral coverage and sampling options, the analyzer enables reliable analysis of a wide range of materials. The integrated touchscreen interface and embedded control system allow standalone operation, providing industrial Raman analysis capabilities in both laboratory and field environments.

LAB-GRADE RAMAN, WHEREVER YOU NEED IT

Powerful spectroscopic performance with a compact design. Integrated Spectrally OS enables rapid spectral acquisition, chemometric analysis, and clear data visualization for confident decisions directly at the point of measurement.

gekko photonics
Engineering-Driven Analytics

Gekko Photonics Sp. z o.o.
ul. K. Liskego 7/5,
50-345 Wrocław, Poland

spectrally@gekkophotonics.com