

Rapid results for analyzing materials outside the lab

Unmatched versatility from the widest spectral range in a handheld

Neospectra Scanner is a handheld Near InfraRed (NIR) spectrometer that enables easy and accurate measurement of a wide variety of parameters in homogeneous and non-homogeneous materials.

End-users can quickly perform near lab-quality analysis from anywhere with the unbeatable combination of NeoSpectra Scanner and mobile apps, Cloud solutions, and prediction models built by experts

Simultaneously measure multiple parameters with an easy to use handheld for accurate insights and instant decisions

- Large sample coverage for non-homogeneous samples
- Analyze a broad range of materials and parameters due to a unique wide spectral range in the extended NIR region
- Ergonomic handheld design to enable different sampling options
- Rugged design enables near-lab analysis in uncontrolled environments
- Built-in screen for monitoring device status and measurement progress
- Wireless operation with no external power source required
- Connects to mobile device via Bluetooth



Just 3 simple steps to results!



Core technology

The NeoSpectra core technology is based on semiconductor Micro Electromechanical Systems (MEMS) microfabrication techniques, promising unprecedented economies of scale, robustness, and consistency between devices.



Applications



Animal feed

Nutritional composition of forages and processed feed



Grains

Composition and quality of cereals, oilseeds, and pulses



Pharmaceutical

Authentication and quantification of raw ingredients



Polymers

Thin film composition, and plastic sorting



Fabrics

Fraud detection, and fabric treatment



Other

applications

Device specifications

Dimensions	7x 3.6 x 2.5 inch (178 x 91 x 62 mm)
Weight	2.2 lbs (1 kg)
Operation Temperature	23:104 °F (-5: 40 °C)
Ingress Protection Rating	IP65
Battery Type	Two rechargeable 18650 batteries, user replaceable
Operating Battery Life 2 Second Scans	800 Scans
Battery Charge Time 1A Charging Current	3 hours till 80% Capacity 5 hours till 100% Capacity
Bulb Lifetime	> 10,000 hrs.
Wireless Connectivity	Bluetooth V4.2 BLE
Charging Port	USB-C
Software	Operation via Neospectra mobile applications on iOS and Android devices

Technical performance specifications

Wavelength Range	1,350 - 2,500 nm (7,400 - 4,000 cm ⁻¹)
Resolution	16 nm (~64 cm ⁻¹)
Typical SNR (rms)*	2,000:1
Sampling Area	~ 0.4 inch (~10 mm) diameter

*SNR is calculated from the root mean square noise (Nrms), which is the standard deviation of 100 consecutive 100% lines at each wavelength.
SNR=1/Nrms

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