



# SCANNER



# INSTANT LAB-LEVEL RESULTS AT THE POINT OF NEED

Most Accurate, Versatile, and Cost-Effective Handheld Fourier Transform Near Infrared (FT-NIR) Spectrometer For On-Site Sample Analysis







# Unlock the Power of NIR Analysis Anywhere, Anytime

In a world where data-driven decisions are crucial, NeoSpectra Scanner and it's accessories emerge as the ultimate tool for professionals seeking rapid material analysis solutions outside the confines of a laboratory to make informed decisions swiftly and accurately. Here's why NeoSpectra Scanner is a game-changer in material analysis:



## **Key Features That Set NeoSpectra Scanner Apart**





#### **Precision & Accuracy**

Widest spectral coverage in NIR (from 1,350 to 2,500 nm) providing accurate performance for various materials and parameters.

#### **Ergonomic Handheld Design**

Designed for one-handed operation, our scanner is comfortable to use and requires minimum training.





#### **Rugged Build**

NeoSpectra Scanner is engineered to thrive in uncontrolled conditions, whether in a lab, on the factory floor, or out in the field.

#### **Battery Operated**

With rechargeable and replaceable batteries, you can count on long-lasting performance wherever you go.

# Sampling Made Simple: Accessories for Every Sample Type

With NeoSpectra's range of accessories, you're equipped to tackle diverse sample types, ensuring accurate and reliable spectroscopic analysis every time. Whether you're working with solids, liquids, or powders, NeoSpectra has you covered.



#### 1. Rotator

A Turn Towards Sampling Excellence

- A rotating cup that effortlessly holds and moves samples over the scanner.
- Enlarges the sampling area for comprehensive analysis.

**Best for:** Non-homogeneous and granular solids such as silages, haylages, grains, seeds and processed feed.



#### 2. Saucer

Frictionless Precision in Every Swipe

- Directly attach to the scanner for frictionless manual movement.
- Enlarge your sampling area effortlessly.

**Best for:** Non-homogeneous solids such as Silages, Hay, Haylages.



#### 3. Transflectance Kit

See Liquids in a New Light

- A set of vials that fit into a holder on top of the scanner.
- Includes a variety of reflectors for different sampling pathlengths.

**Best for:** Clear and opaque liquid samples such as oils and milk



#### 4. Powder Kit

Weighing In for Consistent Powder Insights

- Small dishes that securely fit into a holder on top of the scanner.
- Small weights included to ensure consistent sample presentation.

**Best for:** Powders and ground solids such as powdered milk, ground grains

## **Get Instant Results On Your Mobile App**

Intuitive mobile app provides step-by-step guidance through the process.

- 1 Select material
- 2 Take measurement
- 3 Get results instantly, even when offline







# **Applications Across Industries**

The NeoSpectra Scanner offers impressive versatility. It's the ideal tool for instant and cost-effective decision-making in various industries, including:



**Animal Feed** 



**Forages** 



Ingredients



ents Flour and Milling



Dairy Powders



Chemicals



Grains



Oil Seeds



Medical Cannabis



Textiles



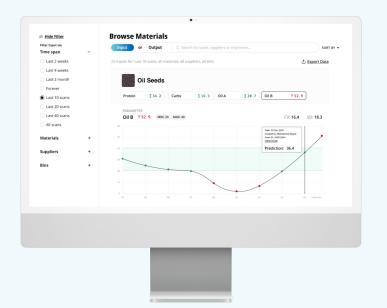
Polymers



Others

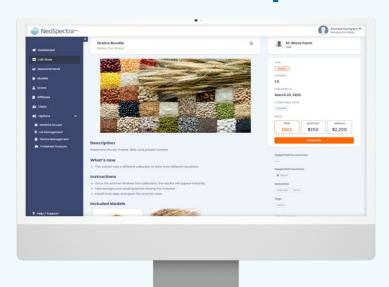
## It's All in the Cloud: Hassle-Free Data Lifecycle Management

Amplify insights by aggregating all your data in one Cloud Portal.





### **NeoSpectra Labstore**



- Largest Calibration Model Library access the world's largest plug-andplay calibration model repository.
- 100+ Products 500+ parameters listed today by key industry players.
- **Get insightful information** to make the right decision about which model best suits your needs

# **General Specifications**

Dimensions	7 x 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)	6 hours on fast charging to reach 100%
Bulb Lifetime	> 10,000 hrs.
Wireless Connectivity	Bluetooth V4.2 BLE
Charging Port	USB-C
Software	Operation via NeoSpectra mobile applications for spectral data collection, and material analysis

# **Technical Specifications**

<b>Wavelength Range</b> SNR>170:1	1,350 - 2,500 nm (7,400 - 4,000 cm <sup>-1</sup> )
<b>Resolution</b> at λ=1,550 nm, FWHM criterion	16 nm (66.6 cm <sup>-1</sup> )
Typical SNR¹ (rms) Scan time = 2s, λ = 2,350 nm	2,000:1
Sample coverage (Diameter of Collected Light Beam)	~ 0.4 inch (~10 mm)

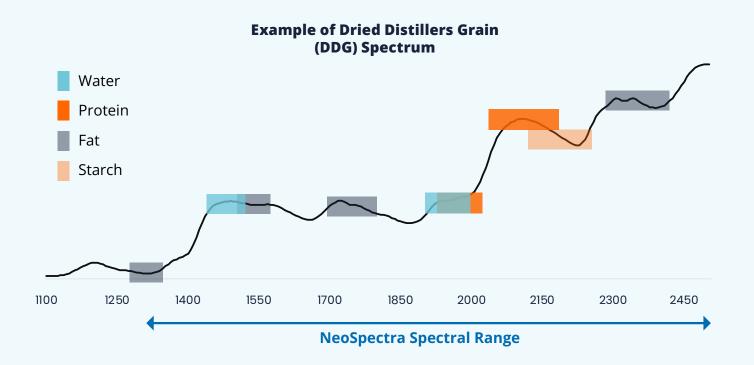
# **How It Works?**

NeoSpectra Scanner operates on the same principles as a laboratory FT-NIR spectrometer but in a compact, portable form thanks to our patented. It uses Near Infrared (NIR) light, which is invisible to the human eye, to analyze materials based on their unique spectral response. This provides invaluable insights into a material's chemical and nutritional composition, allowing for quick and informed decision-making.



# Near-Lab Precision: Why Spectral Range Matters?

As it supports determining critical parameters in most applications and use cases

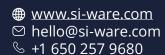




### **Experience the Future of Handheld FT-NIR Spectroscopy**

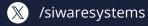
Contact us today to schedule a demonstration or get more information.











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