

VI·A·V·I

MicroNIR OnSite-W

A rugged, wireless, battery-operated near infrared spectrometer designed for rapid, handheld material analysis

Wireless, compact, rugged, and ergonomic, the MicroNIR™ OnSite-W is the latest addition to the VI·A·V·I Solutions innovative, ultra-compact spectrometer product line.

With integrated battery, button, and Bluetooth, the OnSite-W is the ideal solution for mobile material analysis in the factory or in the field. The powerful software suite presents an intuitive user interface that requires minimum training to operate from a tablet or PC.

The MicroNIR OnSite-W is the smallest fully-integrated NIR spectrometer on the market and is enabled by proven VI·A·V·I linear variable filter (LVF) technology. With no moving parts and IP65/IP67 dust/water ingress rating, it is designed for a wide range of material characterization applications in food, agriculture, pharmaceutical, and security markets.



MicroNIR OnSite-W Instrument



MicroNIR OnSite-W in application

Benefits

- Rapid, real-time, non-destructive near-infrared material analysis
- Wireless, compact, rugged, and ergonomic design for one-hand operation
- Multifunction button for one-click data acquisition
- Internal, rechargeable battery with run time greater than 10 hours
- IP65 and IP67 rated for use in wet and dusty environments
- Bluetooth or USB connectivity to tablet or PC
- Compatible with original MicroNIR OnSite accessories
- Powerful MicroNIR Pro model-building and prediction software
- Intuitive, easy-to-use software interface

Applications

- Pharmaceutical raw materials
- Polymers and chemicals
- Narcotics and explosives
- Grain and forage
- Tobacco and agricultural products
- Meat and dairy products

Standard Accessories

The MicroNIR OnSite-W includes the following standard accessories:

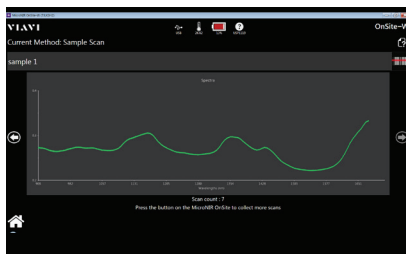
- Two measurement collars with sapphire windows, AR-coated on one side for maximum light throughput
- Protected white reference target with sapphire window
- Rugged carrying case including space for PC and tablet
- USB cable for charging and data connection to tablet or PC



MicroNIR OnSite-W Kit running MicroNIR Pro application (tablet not included)

Software

The MicroNIR OnSite-W system includes the VIAVI MicroNIR Pro software suite with features for data acquisition, calibration and method development, user management, and real-time prediction. Using MicroNIR



MicroNIR Pro Tablet Application

Pro software, a developer can process data and build complete chemometric models using regression and classification

algorithms including PLS, MBSD, SMV, and PCA analyses. Batch mode predictions on stored data are also supported.

MicroNIR Pro software also includes instrument performance qualification per EP 2.2.40 and USP 1119 test criteria and tools enabling Title 21 CFR Part 11 compliance. An enhanced OPC interface is optionally available for integration with process control systems.



Americas +1 800 254 3684
Europe +33 1 30 81 50 41
Asia Pacific +86 512 6956 1319
E-mail ospcustomerservice@viavisolutions.com

© 2024 VIAVI Solutions Inc.
Product specifications and descriptions in this document are subject to change without notice. Patented as described at viavisolutions.com/patents
micronironsitew-ds-osp-ae
30179818 002 0924

osp.viavisolutions.com

The OnSite-W system also includes a standalone tablet application with simplified user interface for data acquisition and real-time prediction in the field. **Please see recommended hardware/software listed in specifications.**

Specifications

| Parameter | Specification |
|---|--|
| Illumination source | Two integrated vacuum tungsten lamps |
| Lamp life | >40,000 hr |
| Sample working distance | 3 mm from window optimal, 0-15 mm |
| Dispersing element | VIAVI linear variable filter (LVF) |
| Detector | 128 pixel InGaAs photodiode array |
| Wavelength range | 908-1676 nm (11,012-5966 cm ⁻¹) |
| Pixel-to-pixel interval | 6.2 nm for 950 – 1650 nm |
| Spectral bandwidth (FWHM) | <1.25% of center wavelength, 1% typical (e.g., @1000 nm, resolution is <12.5 nm) |
| Analog-to-digital convertor | 16 bit |
| Dynamic range (Max) | 1000:1 |
| Measurement time (typical) | 0.25 – 0.5 sec |
| Signal-to-noise ratio (typ.) | 25,000 |
| Integration time | 10 ms typical, minimum 10 µsec |
| Connectivity | Bluetooth 4.1 (BLE) and USB 2.0 |
| Weight | <250 g (<9 oz) |
| Size (Length x Diameter) | 194 mm (6.64") x 47 mm (1.85") |
| Battery | Rechargeable Li-ion, not removable |
| Battery run time/charge | >10 hours with lamps on continuously |
| Battery cycle life | >75% capacity after 300 charge cycles |
| Battery charge time | 3.5 hours at 1 A |
| Export data formats | CAMO .unusb, Grams .spc, ASCII .csv |
| Operating system | Microsoft Windows 10 Pro |
| Minimum screen resolution tablet/PC application | 1920 x 1080/1366 x 768 |
| Software compatibility | MicroNIR Pro 3.0 and above |
| Qualified PC | Microsoft Surface Pro 6 (tablet or PC) |
| Qualified Tablet PC | Dell Latitude 7212 Rugged Extreme |
| Operating temperature | -20 ~ 40°C (noncondensing) |
| Storage temperature | -20 ~ 50°C (noncondensing) |
| Dust and water resistance | IP65 and IP67 |
| Shock and vibration | MIL-PRF-28800F Class 2 |

For more information, please contact your local VIAVI account manager or VIAVI directly at 1-800-254-3684 worldwide or via e-mail at micronir@viavisolutions.com.