



82.2 × 66 × 43.5 mm · < 150 g

Compact diffuse-reflective NIR spectrometer for handheld and embedded scanning applications.

DEVICE FEATURES

- **Scan button** and LED status indicator on top face
- **Scan window** sealed with sapphire glass
- **Micro USB port and power switch** on the rear edge

WAVELENGTH RANGE	SNR	OPTICAL RESOLUTION	WEIGHT	INTERFACE
900–1700 nm	5000:1	Typ. 10 nm	< 150 g	USB / BLE

OPTICAL PERFORMANCE

Wavelength range: 900 – 1700 nm

Signal-to-Noise Ratio (SNR): 5000:1 in 1 second scan

Optical resolution: Typ. 10 nm, Max. 12 nm

Wavelength accuracy: Typ. ±1 nm (verified with SRM2036), Max. ±2 nm

Detector: 1 mm InGaAs (uncooled)

Slit size: 1.8 mm × 0.025 mm

SCANNING & ILLUMINATION

Scan capability: Linear / Hadamard / Slew Scan

Illumination module: Diffuse reflective with two ILT-1088-1 tungsten filament lamps (0.7 W each)

Scan window: Protected and sealed with sapphire glass

CONNECTIVITY & SENSORS

Communication interface: Micro USB / Bluetooth Low Energy (BLE)

Sensors: Humidity and temperature sensor (TI HDC1010)

Core electronics: TI TIVA microcontroller with DLPC150 DMD controller

POWER

Power supply: Micro USB or Li-ion battery (1000 mAh @ 3.7 V)

PHYSICAL & ENVIRONMENTAL

Dimensions: 82.2 × 66 × 43.5 mm

Weight: < 150 g

Operating temperature: 0 – 40 °C, RH Max. 85%

CERTIFICATIONS & COMPLIANCE

Certifications: FCC Part 15C, NCC, CE, BSMI / UN38.3 (battery)

US import classification: HTSUS 9027.30.40 Exempt under 21 CFR 1040.10 and 1040.20, Declaration A2 (NIR light source, no lasers, no UV bulbs)