



NIRLIGHT

The NIRLIGHT is delivered in a compact, ergonomically designed case. Inside, there is a complete set of standard accessories, including:

- Protected white reference target with sapphire window
- Rugged carrying case
- USB cable for charging



NIRLIGHT technical 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	950–1650 nm (10,526–6060 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 converter	16 bit
Dynamic range (Max)	1000:01:00
Measurement time (typical)	0.25–0.5 sec
Signal-to-noise ratio (typ.)	25,000
Integration time	10 ms typical, minimum 10 s
Connectivity	Bluetooth 4.1 (BLE) and USB 2.0
Weight	<250 g (<9 oz)
Size (Length×Diameter)	194 mm (6.64") × 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 1A
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

The system comes with a one-year warranty covering manufacturing defects and hardware-related issues.

