



## NIRLIGHT



### Standard Accessories

The NIRLIGHT includes the following standard accessories:

- 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

### 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

### 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 <sup>-1</sup> )
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
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