Nix Spectro 2 (5 mm)

Product specifications – v3.3



Form factor

Dimensions	45 mm X 60 mm X 60 mm (1.77" X 2.36" X 2.36")
Materials	Durable, matte black powder coated metal enclosure
Haptics and visuals	Vibration and RGB feedback for charging, connection, and measurement state
Features	Scratch-resistant glass lens Dust and water-resistant Hard point for braided aircraft cable attachment

Performance

Measurement speed	1 reported scan/second
Optical resolution	True 31 channel measurement (diffraction grating with 288 pixel diode array)
Spectral visible range	400 – 700 nm, 10 nm resolution reporting
Repeatability	0.05 ΔE_{00} on white (D65, 10°, to mean of 10 measurements every 3 s on white, at a temperature of 23 °C)
Inter-instrument agreement	0.35 ΔE_{00} average, 0.7 ΔE_{00} max. (deviation from Nix Sensor Ltd. standard unit at a temperature of 23 °C on 12 CERAM CCS-II tiles (D65, 10º))
Temperature range	10 °C – 35 °C
Humidity	0% – 80% non-condensing

Optics

Measurement geometry	45°:0° ring illumination optics
Measurement port diameter	16 mm (0.63") diameter
Illumination spot size	6 mm (0.24") diameter
Measurement aperture	5 mm (0.20") diameter
Light source	High CRI, broad spectrum LED light source (white, violet and UV)
Optional Adapters	Liquids, powders, gels, and soft surface adapters available

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Calibration

Each unit individually factory calibrated

Integrated/automatic temperature compensation

In-field normalization: manual on included external ceramic reference

Reflectance measurement

Measurement conditions:

M0 – UV included – ISO 13655:2017

M1 – D50 – ISO 13655:2017

M2 – UV excluded – ISO 13655:2017

Note: Particular reflectance measurement mode availability may differ based on application used.

Density data

Evaluated according to ISO 5-3:2009

Density status: A, E, I, T

Note: Particular density data availability may differ based on application used.

Colorimetry data

Evaluated according to ASTM E308-18

CIEXYZ, CIELAB, LCH(ab), RGB, CMYK, and more

Illuminant: A, C, D50, D55, D65, D75, F2, F7, F11
Observer: 2°, 10°

Note: Particular colorimetry data availability may differ based on application used.

Battery life + charging

USB-C charging of internal lithium polymer battery

90 day (3 month) standby time per charge (device advertising on BLE)

1,000+ scans per charge

Software development kit

Features device connectivity routines, commands to request measurements, and utilities to perform color conversions.

For an up-to-date list of features and supported platforms, visit:
nixsensor.com/nix-software-development-kit/

Packaging + accessories

Impact-resistant, carrying case, ideally suited for field operations

USB-C charging cable

Ceramic reference tile

Inspection certificate

Nix lanyard

Microfiber carrying pouch

Microfiber cloth

Connectivity

Bluetooth Low Energy

Legacy USB CDC Serial

Warranty + expected product lifespan

2 years from date of sale, warranty for manufacturer's defects (does not cover user damage).

Premium service plan available for purchase.
For details, visit:
nixsensor.com/premium-service-plan/

nix™ Color Sensor

For more information on the Nix Spectro 2, visit nixsensor.com or email sales@nixsensor.com