Nix Spectro 2 - 2mm

Product specifications - v2.4

Form factor

Weight	110g (3.9oz) (Accessories not included in weight)
Dimensions	45mm X 60mm X 60mm (1.77" X 2.36" X 2.36")
Materials	Durable, matte black powder coated aluminum enclosure
Haptics	Vibration feedback, RGB feedback
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	0.1 ΔE_{00} on white (D50, 2°, to mean of 10 measurements every 3 s on white, at a temperature of 23ºC)
Inter-instrument agreement	0.5 ΔE_{00} average, 0.8 ΔE_{00} max. (deviation from Nix Sensor Ltd. standard unit at a temperature of 23ºC on Nix CMYK Test Sheet V3.1 (D50, 2º))
Temperature range	10°C – 35°C
Humidity	0% – 80% non-condensing

Optics

Measurement geometry	45º:0º ring illumination optics
Illumination spot size	6 mm (0.24") diameter
Measurement aperture	2 mm (0.08") 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

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.

Software development kit

iOS and Android (BLE); Windows (USB)

Bluetooth requirements: Bluetooth 4.0

Android: Android SDK level 21 (Android 5.0 Lollipop) and above. SDK written in Java

iOS: iOS 11.0 and above. SDK written in Objective C

Windows: .NET framework 4.5 or higher

SDK contains device connection routines and commands to request scan data in 10 nm reporting, XYZ, or Lab (Bluetooth connectivity available for Android and iOS SDK only)

USB serial commands available for simple low level integration on Windows, macOS and Linux

Connectivity

Bluetooth Low Energy

Legacy USB CDC Serial (Windows, Mac, Linux)

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.

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

Packaging + accessories

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

USB C charging cable

Ceramic reference tile

Inspection certificate

Nix lanyard

Microfiber carrying pouch

Microfiber cloth

Warranty + expected product lifespan

12 months from date of sale, warranty for manufacturer's defects (does not cover user damage)

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Color Sensor

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