NS808 Precise Spectrophotometer

Dedicated for Traffic Signs



NS808 Spectrophotometer is a dedicated instrument for the color measurement of traffic signs. It was researched and developed solely by 3nh independently who owns the complete independent intellectual property rights. Its leading position in the industry is earned by its powerful functions, high accuracy and reliability. NS808 can be easily used to measure the brightness factor of reflecting film and chromaticity coordinate of all kinds of traffic signs. Its system has GB2893 safety color and all the standard color module of GB/T18833 road traffic reflecting film built in, so, users can choose from them freely according to application. And users can also conveniently customize polygon tolerance they want.

At the same time, NS808 is also widely used in plastics, electronics, paintings, inks, textiles, garments, dyeing, printing, paper, automobiles, medical, cosmetics and food, etc., and other industries. It is also used in some scientific research institutes and laboratories.

NS808 can make precise measurements in multiple color spaces to multiple color indexes like reflectance spectrum. With the help of this instrument, the study of color matching and color management can be precisely implemented, and also product quality control can be easily done. It's also configured with advanced PC software, connected with PC, more extension functions will come in hand.

Features:

- 1. Specially designed to measure traffic signs.
- 2. Elegant appearance combines ergonomic design.
- $3.\,45\,\%0$ geometry optical structure, conform to standard CIE, ISO, ASTM and DIN, incomparable accuracy.
- 4. 3.5" ultra-large touch-screen makes the operation interface quite friendly.
- 5. Two kinds of standard observer angles, multiple light source types, multiple color spaces and multiple color difference formulas, can meet all kinds of color measurement requests.
- 6. Repeatability $\Delta E^*ab \le 0.04$, inter-instrument $\Delta E^*ab \le 0.2$, super stable and reliable performance.
- 7. Mass memory device, can store more than 10000 pieces of measurement data.
- 8. Powerful PC software with more extension functions.
- 9. Advanced hardware configuration, integrate some innovative technologies.



NS808 Spectrophotometer Specification	
Product Model	NS808
Illuminating/Viewing Method	45 % (45 °ring illuminating, 0 °viewing) Conform to standard CIE No. 15, GB/T3978, GB2893, GB/T18833
Integrating Sphere Size	Ф58mm
Measuring Aperture	$\Phi 8$ mm
Observer	2 %10 °
Repetitive Error	Spectral Reflectance: standard deviation within 0.1%(400~700nm: within 0.2%) Colorimetric Value: standard deviation ∆E*ab≤0.04 (Measurement Conditions: white calibration plate measured 30 times at 5 seconds intervals after white calibration performed.)
Inter-Instrument Error	ΔE*ab≤0.2 (Average value of measuring the 12 tint plates of BCRA series II)
Wavelength Range	400 ~700nm
Wavelength Pitch	10nm
Reflectance Range	0 ~200%
Light Source Type	D65, D50, A, C, D55, D75, F2, F6, F7, F8, F10, F11, F12
Light Source Device	Combined LED Light
Light Source Life	5 years, more than 1.6 million measurements
Sensor	Silicon Photoelectric Diode Array
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV
Color Difference Formula	ΔE^*ab , ΔE^*uv , ΔE^*94 , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, ΔE^*00
Display Data	Spectral Graph/Data, Sample Chromatic Value, Color Difference Value/Graph, PASS/FAIL Result, Color Offset, Color Simulation
Other Chromaticity Data	WI(ASTM E313, CIE/ISO, AATCC, Hunter), YI(ASTM D1925, ASTM 313), TI(ASTM E313, CIE/ISO), Metamerism Index (Mt), Color Strength, Color Stain, Color Fastness
Measuring Time	1.5s
Data Storage	1000 standards, 10000 samples
Data Port	USD&RS232
Dimension	90*77*230mm
Weight	600g
Battery	Li-ion Battery, 5000 measurements in 8 hours.
Operation Temperature	0 ~40°C(32 ~104°F)
Storage Temperature	-20~50°C(-4~122°F)
Standard Accessory	Power Adapter, Li-ion Battery, Operating Instruction, CD-ROM (containing management software), Data Line, White and Black Calibration Cavity, Protective Cover and Wrist Strap.
Optional Accessory	Universal Test Components, Micro Printer, Powder Test Box