NS800 Spectrophotometer

NS800 spectrophotometer is developed by 3nh with independent intellectual property rights. It features with stable performance, precise measurement and powerful functions in the leading position of the same industry.

Features

1. Aesthetic design perfectly combined with ergonomics structure.

2. 45/0 geometrical optics structure, comply with CIE, ISO, ASTM, DIN standard.

3. 3.5 inch large capacitive touch screen.

4. Two standard observer perspectives, multiple light sources modes, a variety of color systems.

5. The repeatability ΔE^*ab is within 0.04, the errors between each

instrument ΔE* ab is less than 0.2.

6. Large capacity storage, can save more than 10000 data.

7. PC software with powerful extension functions.

8. High hardware configuration with a number of innovative technologies.

9. Oversized integrating sphere, more effective homogenization ray of lights and precise measurement.

10. 15° oblique angle screen, more in line with the human eye observation.

Applications

NS800 spectrophotometer is widely used in plastic, electronic, paint, ink, textile, garment, printing and dyeing, food, medical, cosmetic, industries, scientific research institutes, schools and laboratories.　It can measure reflectance spectrum and other color index precisely. NS800 spectrophotometer not only can help to perform color matching and color management studies, but also can control product quality management accurately. The instrument is equipped with high-end color management software which can connect PC to achieve more extension functions.

Specification

Model	NS800
Illumination/observation system	45/0 method (45 ring-shaped illumination, vertical viewing) Comply with CIE No.15，GB/T 3978.
Integrating sphere Size	Φ58mm
Light Source	combined LED sources
Sensor	Silicon photodiodearray
Wavelength range	400~700nm
Wavelength pitch	10nm
Reflectance range	0~100%
Measuring Aperture	Φ8mm
Color Space	CIE LAB,XYZ,Yxy,LCh,CIE LUV
Color difference Formula	$\Delta E^*_{ab}, \Delta E^*_{uv}, \Delta E^*_{94}, \Delta E^*_{cmc(2:1)}, \Delta E^*_{cmc(1:1)}, \Delta E^*_{00}$ v
Other Chromaticity Data	WI(ASTM E313，CIE/ISO,AATCC,Hunter)， YI(ASTM D1925，ASTM 313), TI(ASTM E313，CIE/ISO), Metamerism Index (Mt) Colour Stain, Color Fastness
Observer	2°/10°

Illuminant	D65，A,C,D50，D55，D75，F2，F6，F7，F8，F10，F11,F12
Display Data	Spectral Value/Graph, Colorimetric Value, Color Difference Value/Graph, PASS/FAIL Result, Color Offset, Color Simulation
Measurement Time	1.5s
Repeatability	Spectral Reflectance: standard deviation within 0.1%(400~700nm: within 0.2%) Colorimetric Value: Standard deviation within DeltaE*ab 0.04 (Measurement conditions: white calibration plate measured 30 times at 5 seconds intervals after white calibration was performed.)
Inter Instrument Agreement	Within DeltaE*ab 0.2 (Average for 12 BCRA Series II color tiles)
Dimension	L*W*H=90*77*230mm
Weight	600g
Battery	Li-ion battery. 5000 times within 8 hours.
Lamp Life	5 years, more than 1.6 million measurements
Display Screen	TFT 3.5inch, Capacitive Touch Screen
Interface	USB/RS-232
Data Memory	1000 Standards, 10000 Samples
Operating Temperature	0~40℃（32~104°F）
Storage temperature	-20~50℃（-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	Micro Printer, Powder Test Box
Notes	The specifications are subject to change without notice.