



SPECTROPHOTOMETER NS820

3nh D/8 NS820 spectrophotometer is equipped with SQC8 software, which is also compliant with CIE No.15, GB/T 3978. It not only can measure L*ab value and delta E value accurately, but also can display spectral reflectance curve which can realize color matching function and calculate the real parameters of various color formulas.



D/8 structure



Ergonomic design



Touch screen



More accurate

PRODUCT FEATURES

1. Elegant appearance combines ergonomic design.
2. D / 8° (diffuse uniform illumination 8° reception) in accordance with standard CIE No. 15, GB / T 3978 8°.
3. 3.5" ultra-large touch-screen makes the operation interface quite friendly.
4. 15° oblique angle screen, in line with the human eye observation.
5. Oversized integrating sphere, more effective homogenization ray of lights.
6. Two kind of standard observer angles, multiple light source, color spaces and color difference formulas, which is fit for all kinds of color measurement requests.
7. Repeatability ΔE^*ab within 0.04, inter-instrument ΔE^*ab within 0.2, super stable and reliable performance.
8. Large capacity storage, more than 15000 data.
9. PC software with powerful extension functions.
10. High hardware configuration with a number of innovative technologies.



APPLICATION INDUSTRY

NS820 is widely used in plastic, electronic, paint, ink, textile, garment, printing and dyeing, food, medical, cosmetic, industries, scientific research institutes, schools and laboratories etc.



SPECIFICATION PARAMETER

Illumination/observation system: d/8 (diffused illumination, 8-degree viewing angle) Conforms to CIE No.15, GB/T 3978

Integrating sphere Size: $\Phi 58\text{mm}$

Light Source: Combined LED sources

Sensor: Silicon photodiode array

Color Space: CIE LAB, XYZ, Yxy, LCh, CIE LUV, LAB&WI&YI

Color difference Formula: $\Delta E^*ab, \Delta E^*uv, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*cmc(l:c), CIE2000\Delta E^*00, \Delta E(h)$

Wavelength range: 400~700nm

Wavelength pitch: 10nm

Reflectance range: 0~200%

Measuring Aperture: $\Phi 4\text{mm}$

Other Chromaticity Data : Whiteness - WI (ASTM E313, CIE/ISO, AATCC, Hunter), Yellowness - YI (ASTM D1925, ASTM 313), TI (ASTM E313, CIE/ISO), Metamerism Index (Mt) Colour Stain, Color Fastness, Color Strength, Opacity

Observer: 2°/10°

Illuminant: D65, D50, A, C, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12

Display Data: Spectral Value/Graph, Colorimetric Value, Color Difference Value/Graph, PASS/FAIL Result, Color Offset, Color Simulation, color index setting ($\Delta E^*94, \Delta E^*cmc, \Delta E2000$), tolerance prompt, reverse prompt, time setting, language setting, restore factory setting

Measurement Time: 1.5s

Dimension: L*W*H=90*77*230mm

Inter Instrument Agreement: Within Delta E*ab 0.2 (Average for 12 BCRA Series II color tiles)

Repeatability: Spectral Reflectance: standard deviation within 0.1% (400~700nm: within 0.2%)

Colorimetric Value: Standard deviation within Delta E*ab 0.04 (Measurement conditions: white calibration plate measured 30 times at 5 seconds intervals after white calibration was performed)

Weight: 600g

Battery: Li-ion battery, 2800 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, 15000 Samples

Operating Temperature: 0~40°C (32~104°F)

Storage temperature: -20~50°C (-4~122°F)

Standard Accessory: Power Adapter, Li-ion Battery, Operating Instruction, SQC8 software, White and Black Calibration Cavity, Protective Cover and Wrist Strap

Optional Accessory: Universal Test Components, Micro Printer, Powder Test Box

3nh[®]
Focus on Color

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