

PRODUCT CATALOG



BENCHTOP SPECTROPHOTOMETER BBSP-804



www.biolabscientific.com

BENCHTOP SPECTROPHOTOMETER BBSP-804

Benchtop Spectrophotometer is used for measuring the color and appearance of fluorescent, opaque, transparent and translucent samples under various illuminants

BBSP-804 BENCHTOP SPECTROPHOTOMETER



Double Array 256 Image Element CMOS Sensor; Long life-span stable LED UV LED.

With reflective and transmissive spectrum, accurate Lab value, good to calculate color formula and do precise color transmission.

Auto identify measuring aperture. Freely switchable between 3 measuring apertures: Φ 25.4mm/8mm/4mm. Users also can customize apertures.

Built-in temperature sensor to monitor and compensate the measuring temperature to ensure the measurement more precision.

Wavelength range 360nm - 780nm. Built-in 400nm/420nm/460nm cut off Xenon lamp, more professional in UV measurement.

Independent light source detector, continuously monitor the condition of light sources to ensure the light source reliable.

Multiple measurement modes: Quality Management Mode, Sample Mode; Meet more users' requirement.

More powerful extended functions at the PC software.

SPECIFICATIONS

| Model | BBSP-804 |
|--------------------------|--|
| Illuminant | 360nm-780nm Combined LED Lamp, 400nm cut-off |
| Sensor | 256 Image Element Double Array CMOS Image Sensor |
| Wavelength Pitch | 10 nm |
| Semiband Width | 10 nm |
| Reflectance Range | 0-200% |
| Measuring Aperture | Reflective : Φ 30mm/ Φ 25.4mm, Φ 10mm/ Φ 8mm, Φ 6mm/ Φ 4mm; Transmissive : Φ 30mm, Φ 25.4mm; |
| Integrating Sphere Size | Φ 154mm |
| Optical Geometry | Reflectance: d/8 (SCI⪰ Include UV/Exclude UV) Transmittance: d/0 (SCI⪰ Include UV/Exclude UV) Conforms to CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7 |
| Specular Component | Reflectance: SCI&SCE / Transmittance: SCI&SCE |
| Color Space | CIE LAB,XYZ,Yxy,LCh,CIE LUV,Musell,s-RGB,HunterLab,βxy,DIN Lab99 |
| Color Difference Formula | Δ E ab, Δ E uv, Δ E 94, Δ E cmc(2:1), Δ E cmc(1:1),AE 00, DIN Δ E99, Δ E(Hunter) |
| Colorimetric Index | WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), MI (Metamerism Index), Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness,Gardner Index, APHA/Pt-Co Index, 555 Index |
| Observer | 2° / 10° |
| Illuminants | D65,A,C,D50,D55,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12 |
| Displayed Data | Spectrogram/Values, Chromaticity Values, Color Difference Values/Graph, Pass/Fail Result, Color Offset |
| Measurement time | About 2.4s (Measure SCI & SCE about 5s) |
| Repeatability | Spectral reflectance: Φ 25.4mm/SCl, Standard deviation within 0.05% Chromaticity value: Φ 25.4mm/SCl, Standard deviation within Δ E*ab 0.02 Chromaticity value: Φ 25.4mm/SCl, Standard deviation within Δ E*ab 0.03 |
| Inter-instrument Error | Φ 25.4mm/SCI, Within Δ E*ab 0.15 (Average for 12 BCRA Series II color tiles) |
| Working Environment | Temperature: 0~40°C; Humidity: 0~85% (No Condensation) |
| Storage Environment | Temperature: -20~50°C; Humidity: 0~85% (No Condensation) |
| Language | English and Chinese |

| Data Storage capacity | Standard 2000 Pcs, Sample 20000 Pcs |
|--------------------------|---|
| Light Source Device Life | 5 years, more than 3 million times measurements. |
| Screen | 7" TFT Capacitive Screen-touch Display |
| Data Port | Bluetooth |
| Standard Accessory | White and Black Calibration Board, Checking Green Board, Sample Holder, Φ 4mm, Φ 8mm, Φ 25.4mm Aperture,Power Adapter,USB Cable, User Guide, PC Software |
| Optional Accessory | Micro-printer, Transmissive Test Clamp Component |
| Size | 370x300x200 mm |
| Weight | 9.6kg |
| Power Supply | DC 24V, 3A Power Adapter |
| | |



Biolab Scientific Ltd. 3660 Midland Avenue, Suite 300, Toronto, Ontario M1V 0B8, Canada Email: info@biolabscientific.com | Website: www.biolabscientific.com