



## HANDHELD SPECTROPHOTOMETER BJH1B2 (BHSP-902)

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## DUAL OPTICAL PATHS FLAT GRATING SPECTROPHOTOMETER

D/8° geometric optical structure

Adopt combined LED light source with high life and low power consumption, including UV /excluding UV;

Switch 8mm & 4mm aperture( the flat/ tip measuring aperture can be switched easily, which is suitable for more tested sample);

Dual optical path system, the optical resolution in the visible range is less than 10nm, which can measure the SCI and SCE spectrum of the sample at the same time;

Accurate spectrum and lab data, used for color matching and accurate color transmission;

High hardware configuration: 3.5inch TFT true color screen, capacitive touch screen, 1000 line blazed grating, silicon photocell array detector with large photosensitive area, etc;

USB/Bluetooth dual communication mode, wider adaptability;

Super dirt resistant and stable standard white calibration board;

Large capacity storage space,which can store more than 30,000pieces of test data;

2/10 standard observer's angle, multiple light source modes, multiple surface color systems, meet various standards of chromaticity indicators, and the needs of various customers for color measurement;

Camera locating position and stabilizer cross measurement position;

PC software has powerful function expansion.



Professional guarantee

Large capacity: 1000 standard samples, 30,000 samples (SCI/SCE counts one data);

Illumination light source: Life span is more than 3 million measurements in 5 years.

Dual Channel

Four calibers

Full spectrum

Flat Grating

## SPECIFICATIONS

Model	BJH1B2
Old Model	BHSP-902
Optical Geometry	Reflectance: D/8 (Diffuse illumination, 8° acceptance) SCI & SCE; Include UV/Exclude UV
Standards Compliant	CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO77241, ASTM E1164, DIN5033 Teil7
Integrating Sphere Size	Φ40 mm
Light Source	Combined full spectrum LED light source, UV light source
Spectroscopic Method	Flat Grating
Sensor	Silicon photodiode array (double row 40 groups)
Spectral Range	400-700 nm
Wavelength Pitch	10 nm
Semibandwidth	10 nm
Photometric Range	0-200%
Measurement Aperture	Double aperture: MAV: Φ8 mm/Φ10 mm; SAV: Φ4 mm/Φ5 mm
Specular Component	SCI & SCE
Color Spaces	CIE LAB, XYZ, Yxy, Lch, CIE LUV, sRGB, Hunter Lab, LRV, βxy, DIN Lab99, Munsell (C/2)
Color difference formulas	ΔE*ab, ΔE*uv, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*00, DIN ΔE99, ΔE(Hunter)
Other 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, 555 tone classification
Observer Angle	2° / 10°

Illuminant	D65, A, C, D50, D55, D75, F1,F2 (CWF), F3, F4, F5, F6, F7 (DLF), F8, F9, F10 (TPL5), F11 (TL84), F12 (TL83/U30)
Displayed Data	Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset
Measurement Time	About 1.5 s (SCI & SCE about 3.2 s)
Repeatability	Spectral reflectance: MAV/SCI, std. dev. within 0.08% (400-700 nm: within 0.18%); Chromaticity value: MAV/SCI, within $\Delta E^*ab$ 0.03 (after calibration; measure the average whiteboard 30x at 5 s intervals)
Interinstrument agreement	MAV/SCI, within $\Delta E^*ab$ 0.15 (Average for 12 BCRA Series II color tiles)
Measurement Mode	Single measurement, Average measurement (2-99 times)
Locating Method	Camera locating, stabilizer cross position
Dimension (LxWxH)	129 x 76 x 217 mm
Weight	Approx. 600 g
Battery	Li-ion battery; 6000 measurements within 8 hours
Lamp Life	5 years; >3 million measurements
Screen	3.5-inch TFT color LCD; capacitive touch screen
Interface	USB, Bluetooth
Data storage	Standard: 1,000 pcs; Sample: 30,000 pcs (one PCS can include both SCI & SCE)
Languages	Simplified Chinese, English, Traditional Chinese
Operating Environment	Temp: 0-40 °C; Humidity: 0-85% (no condensation); Altitude <2000 m
Storage Environment	Temp: -20-50 °C; Humidity: 0-85% (no condensation)
Standard Accessories	Power Adapter; User Guide; PC Software (download from office website); USB cable; White & Black Calibration Cavity; Protective Cover; Wrist strap; 8 mm flat aperture; 8 mm tip aperture; 4 mm flat aperture; 4 mm tip aperture
Optional Accessories	Micro Printer; Powder test box
Alt Name	Handheld Spectrophotometer



## FEATURES

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Illumination light source: Life span is more than 3 million measurements in 5 years.





Dual Channel



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Full spectrum



Flat Grating

## APPLICATIONS

Suitable for color analysis and transmission of various solids, liquids, transparent ,fluorescent samples, scientific research experiments, etc.



**Biolab Scientific Ltd.**

Trillium Executive Center, East Tower, 675 Cochrane Dr, Markham, Ontario L3R 0B8, Canada

Email: [info@biolabscientific.com](mailto:info@biolabscientific.com) | Website: [www.biolabscientific.com](http://www.biolabscientific.com)