





# BENCHTOP SPECTROPHOTOMETER





## BENCHTOP SPECTROPHOTOMETER BJH1G1 BJH1G2 BJH1G3

#### PORTABLE DESKTOP SPECTROPHOTOMETER

This Portable Desktop Spectrophotometer Brings LabGrade Accuracy to Your Workbench. It is developed with core spectroscopic technology, and is a gamechanger in color measurement. Three apertures to meet more application requirements, when strict interinstrument delta E ( $\Delta E$ ) is required, benchtop spectrophotometers are an ideal choice.



Adopt international common use D/8,SCI/SCE Synthesis technology; Silicon photodiode array sensor (40 groups with double rows); A variety of color space, a variety of observation light sources; Adopt combination full spectrum LED lamp and UV lamp Each; Camera locating can clearly observe the measured area; Industrialgrade HD touch screen, easy to use user interface; Color management software; Optional Accessory
Adopt international common use d/8 SCI/SCE Synthesis technology:

Adopt international common use d/8 SCI/SCE Synthesis technology: Spectrocolorimeter adopts D/8(diffused illumination, 8degree viewing angle) which is widely applicable in the world, and SCI/SCE (specular component included/specular component excluded) Synthesis technology, supporting SCI+SCE simultaneous

#### **SPECIFICATIONS**

Model	BJH1G1	BJH1G2	BJH1G3
Old Model	BBSP-807	BBSP-808	BBSP-809
Optical Geometry	D/8 (diffuse illumination, 8° a UV/Exclu	45/0 (45 ringshaped illumination, 0° viewing angle)	
Standards Compliant	CIE No.15, GB/T 3978, GB	STM E1164, DIN5033 Teil7	
Integrating Sphere Size			
Light Source Device	Combined LED Lamp, UV Lamp	Combined LED Lamp Combined LED Lamp	
Spectroscopic Method		PlaneGrating	
Sensor	Silicon photodiode array (40 groups)		256 Image Element Double Array CMOS Image Sensor
Spectral Range		400-700 nm	
Wavelength Pitch		10 nm	
Semibandwidth		10 nm	
Photometric Range	0-200%		
Measurement Aperture	MAV: Φ8 mm/Φ10 mm; SAV: Φ4 mm/Φ5 mm	Customized single caliber: MAV: Φ8 mm/Φ10 mm; SAV: Φ4 mm/Φ5 mm	Customized single caliber: LAV: $\Phi$ 18 mm/ $\Phi$ 20 mm; MAV: $\Phi$ 8 mm/ $\Phi$ 10 mm; SAV: $\Phi$ 4 mm/ $\Phi$ 5 mm
Lightincluded Mode	Both SCI & SCE modes		45/0
Color Spaces	CIE LAB, XYZ, Yxy, LCh, CIE LUV, sRGB, HunterLab, βxy, DIN Lab99, Munsell (C/2)	CIE LAB, XYZ, Yxy, LCh, CIE LUV, sRGB, βxy, Munsell (C/2)	CIE LAB, XYZ, Yxy, LCh, CIE LUV, sRGB, HunterLab, βxy, DIN Lab99, Munsell (C/2)
Color difference formulas	$\Delta$ E*ab, $\Delta$ E*uv, $\Delta$ E*94, $\Delta$ E*cmc(2:1), $\Delta$ E*cmc(1:1), $\Delta$ E*00, DIN $\Delta$ E99, $\Delta$ E(Hunter)	$\Delta$ E*ab, $\Delta$ E*uv, $\Delta$ E*94, $\Delta$ E*cmc(2:1), $\Delta$ E*cmc(1:1), $\Delta$ E*00	$\Delta$ E*ab, $\Delta$ E*uv, $\Delta$ E*94, $\Delta$ E*cmc(2:1), $\Delta$ E*cmc(1:1), $\Delta$ E*00, DIN $\Delta$ E99, $\Delta$ E(Hunter)
Other Colorimetric Data	WI (ASTM E313, CIE/ISO, AATCC, Hunter); YI (ASTM D1925, ASTM 313); Mt (Metamerism Index), Staining Fastness, Color Fastness, Color Strength, Opacity, 8° gloss, 555 Index	WI (ASTM E313, CIE/ISO, AATCC, Hunter); YI (ASTM D1925, ASTM 313); Staining Fastness, Color Fastness, Color Strength, Opacity, 8° gloss, 555 Index	WI (ASTM E313, CIE/ISO, AATCC, Hunter); YI (ASTM D1925, ASTM 313); Mt (Metamerism Index), Staining Fastness, Color Fastness, Color Strength, Opacity, 555 Index
Observer	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)	D65, A, C, D50, F2 (CWF), F7 (DLF), F10 (TPL5), F11 (TL84), F12 (TL83/U30)	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, Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset			
Measurement Time	About 1.5 s (simultaneou	About 1.8 s		
Repeatability	Chromaticity value (MAV/SCI): within $\Delta E^*$ ab 0.02 (postcalibration 30x white plate at 5 s intervals)	Within ∆E*ab 0.025 (postcalibration 30x white plate at 5 s intervals)	Within $\Delta E^*$ ab 0.02 (postcalibration 30x white plate at 5 s intervals)	
Interinstrument agreement	MAV/SCI within $\Delta$ E*ab 0.15 (avg for 12 BCRA Series II tiles)	MAV/SCI within $\Delta$ E*ab 0.20 (avg for 12 BCRA Series II tiles) MAV/SCI within $\Delta$ E*ab 0 for 12 BCRA Series II		
Measurement method	Single measurement; average measurement (2-99 times)			
Locate Mode	Display came	era locating	/	
Size (LxWxH)	370 x 240 x 260 mm			
Weight	About 7.8 kg			
Battery Performance / Power	DC 24 V, 3 A Power Adapter			
Lamp Life	5 years; >3 million times measurements			
Screen	7" TFT capacitive screentouch display			
Interface	USB, Bluetooth, Trigger switch interface	USB, Trigger switch interface	USB, Bluetooth, Trigger switch interface	
Data storage	Standard: 1000 pcs; Sample: 30000 pcs (one PCS can include both SCI & SCE )	Standard: 1000 pcs; Sample: 20000 pcs (one PCS can include both SCI & SCE)  Standard: 1000 pcs; Sa 30000 pcs (one PCS can both SCI & SCE)		
Languages	Chinese, English, Traditional Chinese			
Standard Accessories	Power Adapter, USB Cable, User Guide, PC Software (download from website), Calibration Board			
Measuring caliber	Φ8 & Φ4 mm	Choose		
Optional Accessories	Mini printer, foot switch, rotating bracket			
Alt Name	Portable Desktop Spectrophotometer			

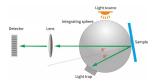






## **FEATURES**

Adopt international common use D/8,SCI/SCE Synthesis technology; Silicon photodiode array sensor (40 groups with double rows); A variety of color space, a variety of observation light sources; Adopt combination full spectrum LED lamp and UV lamp Each; Camera locating can clearly observe the measured area; Industrialgrade HD touch screen, easy to use user interface; Color management software; Optional Accessory



Adopt international common use d/8 SCI/SCE Synthesis technology:

Spectrocolorimeter adopts D/8(diffused illumination, 8degree viewing angle) which is widely applicable in the world, and SCI/SCE (specular component included/specular component excluded) Synthesis technology, supporting SCI+SCE simultaneous rapid measurement, and the test time is about 3.2 seconds.



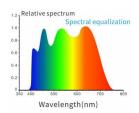
Silicon photodiode array sensor (40 groups with double rows):

Double 40 array sensor with larger area, high light saturation, high sensitivity of low light and wide spectral response range ensure the measurement speed, accuracy, stability and consistency of the instrument.



A variety of color space, a variety of observation light sources:

Portable desktop spectrophotometer color measurement instrument provides CIE LAB, XYZ, Yxy, LCh, CIE LUV, s RGB, HunterLab, βxy, DIN Lab99, Munsell (C / 2) color space, and D65, A, C, D50, D55, D75, F1, F2 (CWF), F3, F4 and F5, F6 and F7 (DLF), F8, F9, F10 (TPL5), and F11 (TL84), F12 (TL83 / U30) light sources, which can meet the special measurement requirements under different measurement conditions.



Adopt combination full spectrum LED light source and UV light source each:

Full band balanced LED light source ensures sufficient spectral distribution in visible light range, avoids the spectral loss of white LED in specific band, ensures the accuracy of instrument measurement speed and measurement results, and professional UV light source ensures more reliable UV testing.



Camera locating can clearly observe the measured area:

Spectrophotometer has a builtin camera for positioning, which can accurately determine whether the measured part of the object is the center of the target through realtime viewing by the camera, thus improving the measurement efficiency and accuracy.



#### Calibration Certificate:

A spectrophotometer has been verified and tested. After leaving the factory, each instrument is verified according to the measurement standards of authoritative verification departments, and the measurement data are traceable to the National Metrotechnical Institute to ensure the authority of the instrument test data.



Industrialgrade HD touch screen, easy to use user interface:

Using a 7inch industrial grade hd touch screen, smooth operation, the user interface is easy to use and it makes the operation become comfortable and convenient.



#### Color management software:

SQCX quality management software with spectrophotometer is suitable for quality monitoring and color data management in various industries. Data the user's color management, compare color differences, generate test reports, provide multiple color space measurement data, and customize the customer's color management.

#### **APPLICATIONS**

Portable desktop spectrophotometer color measurement instrument equipped with customized single aperture  $\Phi$ 4mm or  $\Phi$ 8mm, good for horizontal or vertical measurement, wider adaptability, suitable for precise color measurement and quality control in textile and garment printing and dyeing, plastic electronics, ceramics and other industries.

## BENCHTOP SPECTROPHOTOMETER BJH1H1 BJH1H2

#### NONCONTACT BENCHTOP SPECTROPHOTOMETER

The unique and innovative design can not only provide noncontact measurement solutions directly from the production line, It can also ensure stable and high-precision measurement results.



Noncontact,  $45 \ / \ 0$  geometric optical structure to measure the reflectance and chromaticity of objects;

The movable measuring head moves up and down according to the actual height of the measured object;

Large touch screen measurement interface, realtime display of measurement data, to realize more measurement functions;

Multiple measurement modes (sample, quality control, continuous statistical mode) can be selected to meet the personalized needs.

## **SPECIFICATIONS**

Model	BJH1H1	BJH1H2
Old Model	BBSP-805	BBSP-806
Optical Geometry	45/0 (45° ring uniform illumination, 0° accept)	
Standards Compliant	CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO 7724-1, ASTM E1164, DIN 5033 Teil 7	
Light Source Device	360-780 nm Combined LED Lamp, UV Lamp 360-780 nm Combined LED Lamp	
Spectroscopic Method	Concave-grating Concave	
Sensor	256 Image Element Double arrays CMOS Image Sensor	
Spectral Range	400-700 nm / 1	0 nm output
Sample distance	>7.5 r	nm
Height adjustment	Manual adjustment, automatic adjustment (the test height can be stored)	Manual adjustment (the test height can be stored)
Height range	0-150 mm	
Photometric Range	0-200 %	
Integrating Sphere Size	Φ20 mm (Customized <20 mm)	Φ20 mm
Measurement mode	Sample mode; Quality control mod	le; Continuous statistical mode
Locate Mode	Display camera locating	
Color Spaces	CIE LAB, XYZ, Yxy, LCh, CIE LUV, HunterLAB	
Color difference formulas	$\Delta$ E*ab, $\Delta$ E*uv, $\Delta$ E*94, $\Delta$ E*cmc(2:1), $\Delta$ E*cmc(1:1), $\Delta$ E*00, $\Delta$ E (Hunter)	
Other Colorimetric Data	WI (ASTM E313, CIE/ISO, AATCC, Hunter); YI (ASTM D1925, ASTM 313); MI (Metamerism Index); Staining Fastness; Color Fastness; Color Strength; Opacity	
Observer	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, Chromaticity Values, Color Difference Values/Graph, Pass/Fail Result, Color Offset	
Measurement Time	About 1.5 s	
Repeatability (Spectral reflectance)	Std. dev. within 0.08 % (400-700 nm: within 0.18 %)	
Repeatability (Chromaticity value)	Within ∆E*ab 0.05	Within ∆E*ab 0.03
Inter-instrument agreement	Within $\Delta E^*$ ab 0.2 (Average for 12 BCRA Series II color tiles)	Within $\Delta E^*$ ab 0.25 (Average for 12 BCRA Series II color tiles)

Measurement method	Single measurement; Average measurement (2-99 times)		
Size (LxWxH)	330 x 250 x 370 mm		
Weight	About 10 kg		
Battery Performance / Power	DC 24 V, 3 A power adapter		
Life Lamp	5 years, >3 million measurements		
Screen	7" TFT capacitive touch display		
Interface	USB, Bluetooth	USB	
Data storage	Sample mode + QC mode: 40,000; Continuous statistics: 10,000	Sample mode+ QC mode: 30,000; Continuous statistics: 10,000	
Languages	English & Chinese		
Operating Environment	Temperature: 0-40 °C; Humidity: 0-85 % (No condensation)		
Storage Environment	Temperature: -20-50 °C; Humidity: 0-85 % (No condensation)		
Standard Accessories	Power Adapter, USB Cable, User Guide, PC Software (download from website), Standard calibration plate, Black calibration board	Power Adapter, USB Cable, User Guide, PC Software (download), Standard calibration plate, Black calibration board	
Optional Accessories	Micro Printer, Powder test box		
Alt Name	NonContact Benchtop Spectrophotometer		







## **APPLICATIONS**

A 45/0 non contact benchtop spectrophotometer can achieve precise non contact measurement between the measuring probe and the sample like liquids, sauces, powders, etc. It can be applied for accurate color analysis and transmission In laboratories and R & D industries; It can also be used for accurate color measurement and quality control of automated production lines; It is widely used in cosmetics, fruits and vegetables, food hygiene, plastic electronics, paint and ink, printing, ceramics and other industries, and also for fluorescence sample measurement.



Cosmetics



Food



Sauces



Powder



Liquid



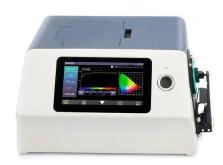
Laboratory

# BENCHTOP SPECTROPHOTOMETER BJH1C1 TO BJH1C4

BENCHTOP GRATING SPECTROPHOTOMETER

Benchtop Spectrophotometer BJH1C1

A color spectrometer is a hightech device analyzing light's spectral composition to measure color accurately, and uses the latest technology for precise, reliable color measurements. Using diffraction gratings or prisms, it splits light into wavelengths, enabling precise quantification of color parameters like hue, saturation, and brightness. Ideal for ensuring color consistency across materials-from plastic molding to cosmetic pigments-by translating visual color into measurable data.



Benchtop Spectrophotometer BJH1C1

High configuration of hardware: 7 inches TFT Color Capacitive Touchscreen Display; Bluetooth 2.1; Concave Grating.

Double Array 256 Image Element CMOS Sensor; Long lifespan stable LED, UV LED. With reflective and transmissive spectrum, accurate Lab value, good to calculate color formula and do precise color transmission.

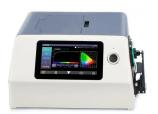
Auto identify measuring aperture. Freely switchable between 4 measuring apertures:  $\phi$ 25.4mm/15mm/8mm/4mm. Users also can customize apertures. Builtin temperature sensor to monitor and compensate the measuring temperature to ensure the measurement has more precision. Wavelength range 360nm - 780nm. Builtin 400nm cut off/420nm cut off/460nm cut off (only xenon lamp edition), more professional in UV measurement.

# **SPECIFICATIONS**

Model	BJH1C1	BJH1C2	
Old Model	BBSP-803	BBSP-804	
Optical Geometry	Reflectance: d/8 (SCI⪰ Include UV/Exclude UV) Transm Conforms to CIE No.15, GB/T 3978, GB 2893, GB/T 1883	ittance: d/0 (SCI⪰ Include UV/Exclude UV);	
Integrating Sphere Size	Φ154 mm		
Illuminant	360 nm-780 nm Combined LED Lamp, 400 nm cutoff, 420 nm cutoff, UV Lamp	360 nm-780 nm Combined LED Lamp, 400 nm cutoff	
Sensor	256 Image Element Double Array CMOS Image Sensor		
Wavelength Pitch	10 nm		
Semiband Width	5 nm		
Reflectance Range	0-200%		
Measuring Aperture	Reflective: $\Phi$ 30 mm/ $\Phi$ 25.4 mm, $\Phi$ 18 mm/ $\Phi$ 15 mm, $\Phi$ 10 mm/ $\Phi$ 8 mm, $\Phi$ 6 mm/ $\Phi$ 4 mm; Transmissive: $\Phi$ 30 mm/ $\Phi$ 25.4 mm;	Reflective: $\Phi$ 30 mm/ $\Phi$ 25.4 mm, $\Phi$ 10 mm/ $\Phi$ 8 mm, $\Phi$ 6 mm/ $\Phi$ 4 mm; Transmissive: $\Phi$ 30 mm/ $\Phi$ 25.4 mm;	
Specular Component	Reflectance: SCI & SCE Transm	ittance: SCI & SCE	
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, sRGB, F	HunterLab, βxy, DIN Lab99	
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, DIN $\Delta$ E99, $\Delta$ E(Hunter)	$\Delta E$ ab, $\Delta E$ uv, $\Delta E$ 94, $\Delta E$ cmc(1:1), $\Delta E$ 00, DIN $\Delta E$ 99, $\Delta E$ (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/ PtCo Index, 555 Index, Haze (ASTM D1003), Saybolt, Color code (ASTM D1500)		
Observer	2° / 10°		
Illuminants	D65,A,C,D50,D55,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12,CWF,DLF,TL83,TL84,TPL5,U30		
Displayed Data	Spectrogram/Values, Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset		
Measurement time	About 2.4 s (simultaneous measurement SCI/SCE about 5 s)		
Repeatability	Spectral reflectance: $\Phi$ 25.4 mm/SCl - Standard deviation within 0.04% (400-700 nm: within 0.04%);Chromaticity value: $\Phi$ 25.4 mm/SCl - Standard deviation within $\Delta$ E*ab 0.01;Spectral Transmittance: $\Phi$ 25.4 mm/SCl - Standard deviation within 0.05% (400-700 nm: within 0.04%);Chromaticity value: $\Phi$ 25.4 mm/SCl - Standard deviation within $\Delta$ E*ab 0.02	Standard deviation within 0.05%;Standard deviation within $\Delta E^*$ ab 0.02;Standard deviation within $\Delta E^*$ ab 0.03	
Interinstrument Error	$\Phi$ 25.4 mm/SCI Within $\Delta$ E*ab 0.12 (Average for 12 BCRA Series II color tiles)	$\Phi$ 25.4 mm/SCl Within $\Delta$ E*ab 0.15	
Size	370x300x200 mm		
Weight	9.6 kg		
Power Supply	DC 24 V, 3 A Power Adapter		
Light Source Device Life	5 years; more than 3 million times measurements.		
Screen	7" TFT Capacitive Screentouch Display		
Data Port	USB & Bluetooth	USB	
Data Storage Capacity	Standard: 5000 Pcs; Sample: 40000 Pcs. (One PCS can include both SCI and SCE)	Standard: 2000 Pcs; Sample: 20000 Pcs.	
Language	Simplified Chinese, Traditional Chinese, English (Optional customized German, French and Spanish)		
Working Environment	Temperature: 0-40°C; Humidity: 0-85% (No Condensation)		
Storage Environment	Temperature: -20-50°C; Humidity: 0-85% (No Condensation)		

Standard Accessory	Power Adapter, User Guide, CD Disk (PC Software), USB cable, Standard Calibration Board, Black Calibration Cavity, Transmission black baffle, Sample holder, 25.4 mm caliber, 15 mm caliber, 8 mm caliber, 4 mm caliber, Transmissive Test Component, Micro Aperture (4 mm) transmission test clamp component		Power Adapter, User Guide, CD Disk (PC Software), USB cable, Standard Calibration Board, Black Calibration Cavity, Transmission black baffle, Sample holder, 25.4 caliber, 8 caliber, 4 caliber
Optional Accessory	Microprinter		Microprinter, Transmissive Test Component, Instrument inversion components, culture dish
Alt Name	Benchtop Grating S	oectropl	hotometer
Model	BJH1C3 BJH1C4		BJH1C4
Old Model	BBSP-801		BBSP-802
Optical Geometry	Reflection: D/8 (diffuse illumination, 8° direction reception), transmission: D/0 (diffuse illumination, 0° direction reception), SCI/SCE measurement, including UV/exclude UV measurement; haze (ASTM D1003)		
Standards compliant	CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7		24/1, ASTM E1164, DIN5033 Teil7
Integrating Sphere Size	Φ154	Φ154 mm	
Illuminant	360 nm-780 nm Xenon lamp, 400/420/460 nm cutoff		50 nm-780 nm Xenon lamp, 400 nm cutoff
Sensor	256 Image Element Double Array CMOS Image Sensor	256 lm	nage Element Double Array CMOS Image Sensor; Concavegrating
Wavelength Pitch	10 r	m	
Semiband Width	5 nm 10 nm		
Reflectance Range	0-200%		
Measuring Aperture	Reflective: Φ30mm/Φ25.4mm, Φ18mm/Φ15mm, Φ10mm/Φ8mm, Φ6mm/Φ4mm; Transmissive: Φ30mm/Φ25.4mm		lective: $\Phi$ 30mm/ $\Phi$ 25.4mm, $\Phi$ 10mm/ $\Phi$ 8mm, nm/ $\Phi$ 4mm; Transmissive: $\Phi$ 30mm/ $\Phi$ 25.4mm
Specular Component	Reflectance: SCI & SCE Transmittance: SCI & SCE		
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV,Musell , sRGB, HunterLab, βxy, DIN Lab99	CIE	E LAB, XYZ, Yxy, LCh, CIE LUV,Musell ,sRGB, HunterLab, βxy, DIN Lab99
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, DIN $\Delta$ E99, $\Delta$ E(Hunter)	∆E al	b, $\Delta$ E uv, $\Delta$ E 94, $\Delta$ E cmc(1:1), $\Delta$ E 00, DIN $\Delta$ E99, $\Delta$ 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, Gardner Index, APHA/PtCo Index, 555 Index, Haze (ASTM D1003), Saybolt, Color code (ASTM D1500)		
Observer	2°/10°		
Illuminants	D65,A,C,D50,D55,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12,CWF,DLF,TL83,TL84,TPL5,U30		
Displayed Data	Spectrogram/Values, Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset		alues/Graph, PASS/FAIL Result, Color Offset
Measurement time	About 2.4 s (simultaneous measurement SCI/SCE about 5 s)		
Repeatability	Spectral reflectance: $\Phi$ 25.4 mm/SCI - Standard deviation within 0.06% (400-700 nm: within 0.05%); Chromaticity value: $\Phi$ 25.4 mm/SCI - Standard deviation within $\Delta$ E*ab 0.012; Spectral transmittance: $\Phi$ 25.4 mm/SCI - Standard deviation within 0.06% (400-700 nm: within 0.06%); Chromaticity value: $\Phi$ 25.4 mm/SCI - Standard deviation within $\Delta$ E*ab 0.015	within	ard deviation within 0.07%; Chromaticity value $\Delta E^*$ ab 0.015; Spectral transmittance standard ation within 0.07%; Chromaticity value within $\Delta E^*$ ab 0.018
Interinstrument Error	$\Phi$ 25.4 mm/SCI Within $\Delta$ E*ab 0.12 (Average for 12 BCRA Series II color tiles)		$\Phi$ 25.4 mm/SCI Within $\Delta$ E*ab 0.15
Size	370(L)x300(W)x200(H) mm		
Weight	about 9.6 kg		
Power Supply	DC 24 V, 3 A Power Adapter		

Light Source Device Life	5 years; more than 3 million times measurements.		
Screen	7" TFT Capacitive Screentouch Display		
Data Port	USB & Bluetooth, Print serial port	USB, Print serial port	
Data Storage Capacity	Standard: 5000 Pcs; Sample: 40000 Pcs. (One PCS can include both SCI and SCE)	Standard: 2000 Pcs; Sample: 20000 Pcs.	
Language	English & Chinese		
Working Environment	Temperature: 0-40°C; Humidity: 0-85% (No Condensation)		
Storage Environment	Temperature: -20-50°C; Humidity: 0-85% (No Condensation)		
Standard Accessory	Black Calibration Board, Standard calibration plate, Fixing frame Sample Holder, Φ4 mm, Φ8 mm, Φ15 mm, Φ25.4 mm Aperture, Power Adapter, USB Cable, User Guide, PC Software, Transmissive Test Clamp Component, Transmission blackboard	Black Calibration Board, Standard calibration plate, Sample Holder, $\Phi 4$ mm, $\Phi 8$ mm, $\Phi 25.4$ mm Aperture, Power Adapter, USB Cable, User Guide, PC Software, Fixing frame, Transmission blackboard	
Optional Accessory	Micro printer, micro hole (4 mm) transmission component, instrument inversion component	Micro printer, transmission test component, micro hole (4 mm) transmission component, instrument inversion component	
Alt Name	Benchtop Grating Spectrophotometer		









BJH1C1 BJH1C3 BJH1C4

BJH1C2

**FEATURES BJH1C1** 

High configuration of hardware: 7 inches TFT Color Capacitive Touchscreen Display; Bluetooth 2.1; Concave Grating. Double Array 256 Image Element CMOS Sensor; Long lifespan 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 4 measuring apertures: φ25.4mm/15mm/8mm/4mm. Users also can customize apertures.

Builtin temperature sensor to monitor and compensate the measuring temperature to ensure the measurement has more precision. Wavelength range 360nm - 780nm. Builtin 400nm cut off/420nm cut off/460nm cut off (only xenon lamp edition), more professional in UV measurement.

Independent light source detectors continuously monitor the condition of light sources to ensure the light source is reliable. Multiple measurement modes: Quality Management Mode, Sample Mode; Meet more users' requirements.

A variety of optional accessories: Reflection sample holding tool, transmission fixture, micro 4mm aperture transmission test components, instrument inversion test components, applicable to more working conditions;

Big capacity data storage, for 40000 pieces test result.

Builtin camera locating.

More powerful extended functions at the PC software.



Next Generation Benchtop Spectrophotometer with Advanced Functionality and Enhanced Usability.



High configuration of hardware: 7 inches TFT Color Capacitive Touchscreen Display; Concave Grating.

Double Array 256 Image Element CMOS Sensor; Long lifespan 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 4 measuring apertures: φ25.4mm/15mm/8mm/4mm. Users also can customize apertures.

Builtin temperature sensor to monitor and compensate for the measuring temperature to ensure the measurement has more precision.

Wavelength range 360nm - 780nm. Builtin 400nm cut off/460nm cut off (only xenon lamp edition), more professional in UV measurement.

Independent light source detectors continuously monitor the condition of light sources to ensure the light source is reliable. Multiple measurement modes: Quality Management Mode, Sample Mode; Meet more users' requirements.

A variety of optional accessories: Reflection sample holding tool, transmission fixture, micro 4mm aperture transmission test components, instrument inversion test components, applicable to more working conditions;

Big capacity data storage, for 20000 pieces test result.

Builtin camera locating.

More powerful extended functions at the PC software.

## FEATURES BJH1C3 BJH1C4

High configuration of hardware: 7 inches TFT Color Capacitive Touchscreen Display; Concave Grating.

Double Array 256 Image Element CMOS Sensor; Long lifespan 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 4 measuring apertures:  $\phi$ 25.4mm/15mm/8mm/4mm. Users also can customize apertures.

Builtin temperature sensor to monitor and compensate for the measuring temperature to ensure the measurement has more precision.

Wavelength range 360nm - 780nm. Builtin 400nm cut off/460nm cut off (only xenon lamp edition), more professional in UV measurement.

Independent light source detectors continuously monitor the condition of light sources to ensure the light source is reliable. Multiple measurement modes: Quality Management Mode, Sample Mode; Meet more users' requirements.

A variety of optional accessories: Reflection sample holding tool, transmission fixture, micro 4mm aperture transmission test components, instrument inversion test components, applicable to more working conditions;

Big capacity data storage, for 20000 pieces test result.

Builtin camera locating.

More powerful extended functions at the PC software.

#### **APPLICATIONS BJH1C1**

A benchtop spectrophotometer is used to do precise color analysis and transmission in laboratories, allowing the user to color measurement most applications including powders, liquids, gels, pastes, granules and solid materials. It can be widely applied in different industries, such as plastics, electronics, paint and ink, printing, garments, leather, paper, auto, medical, cosmetics, food, science institutes, laboratories.



#### Plastic



Hardware



Printing



Paint



Textile



Laboratory



Food



Cosmetics

A benchtop spectrophotometer is used to do precise color analysis and transmission in laboratories. It can be widely applied in different industries, such as plastics, electronics, paint and ink, printing, garments, leather, paper, auto, medical, cosmetics, food, science institutes, laboratories.

## **APPLICATIONS BJH1C3 BJH1C4**

A benchtop spectrophotometer is used to do precise color analysis and transmission in laboratories. It can be widely applied in different industries, such as plastics, electronics, paint and ink, printing, garments, leather, paper, auto, medical, cosmetics, food, science institutes, laboratories.



## Biolab Scientific Ltd.