



COLORIMETER BKH-301

COLORIMETER BKH-301

COLORIMETER

This is a handheld 45/0 illumination geometry colorimeter with a large 20mm measuring aperture, a 3.5-inch IPS color capacity touch screen, and can connect with mobile phone or PC. This device can work independently without connecting APP on mobile phone or PC software. Several color charts help matching the closest color number of scanned color in a short time. The device also has a color comparison function, supporting multiple methods of adding standard. Availability of setting threshold of color difference ensures QC quick inspection. The device can connect APP and PC software, expanding its functions such as color sharing and printing reports.



Large measuring aperture, higher precision

As it can measure larger areas with its large 20mm measuring aperture, the device ensures higher precision on the test results as it acquires more even color data when measuring textured or rough surface materials.

Touch screen makes measurement convenient

The device adopts a 3.5-inch IPS color capacity touch screen, no need to operate by pressing a button. It offers smooth user operation experience and interactive interface, simple operation.

Built-in multiple electronic color charts

The device provides multiple sets of electronic color charts applicable for many industries (RAL, Pantone, NCS, etc.) can quickly match 3 closest serial numbers in the color charts with precision rate over 90%, keeping your hands free from

SPECIFICATIONS

Model	BKH-301
Illumination geometry	45/0 (45° annular illumination, 0° viewing angle)
Illumination light source	Full spectrum LED light source
Spectral Range	400-700nm
Spectral Interval	10nm
Measuring aperture	20mm
Measurement conditions	Light source D65, field of view 10°
Measuring time	1s
Color space	CIE Lab,LCh,Luv,Yxy,CMYK,RGB,YI-98WI-98,WI-Ganz,WI-Hunter,WI-R457,HSL,HSV,ITA,Spectra
Color difference formula	$\Delta E^*ab, \Delta E^*uv, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*00, \Delta E^*cmc(1.4:1)$
Repeatability	Standard deviation $\Delta E^*ab \leq 0.03$ (Measurement condition: the average value of 30 measurements on the white tile at an interval of 3s after calibration)
Dimension	86mm X 62.5mm X 158mm
Weight	225g
Power supply	Rechargeable lithium battery 3.7V@4000mAh, can measure 10,000 times continuously under full charge
Display	480x320 dot matrix IPS color screen
Language	Simplified Chinese, English, Turkey
Charging port	USB(Type-C)
Data transmission	USB, Bluetooth
Operating temperature range	0~45°C, 0~85%RH(no condensation)
Storage temperature range	-25~55°C, 0~85%RH(no condensation)
Alt Name	Colorimeter

FEATURES

Large measuring aperture, higher precision

As it can measure larger areas with its large 20mm measuring aperture, the device ensures higher precision on the test results as it acquires more even color data when measuring textured or rough surface materials.

Touch screen makes measurement convenient

The device adopts a 3.5-inch IPS color capacity touch screen, no need to operate by pressing a button. It offers smooth user operation experience and interactive interface, simple operation.

Built-in multiple electronic color charts

The device provides multiple sets of electronic color charts applicable for many industries (RAL, Pantone, NCS, etc.) can quickly match 3 closest serial numbers in the color charts with precision rate over 90%, keeping your hands free from carrying heavy color charts.

Large storage space

With massive storage space, users can create personalized color databases and easily enter industry-specific color card information.

CIE Lab color deviation indication

Only two clicks on the screen are needed to complete a color difference measurement. The colorimeter provides the color deviation indication of the three color channels of CIE Lab and assistance for color mixing.

Various ways to complete color comparison

You can enter the values of the standard color in the color compare interface or just add from the personal color chart and standard color chart. No need to worry about ageing and discoloration of samples.

Achieve more efficient quality control

In the color difference comparison mode, you can set a color difference threshold, the colorimeter shows pass/fail, ΔL , Δa and Δb - especially for rigorous industrial settings.

Good Repeatability

Good repeatability, $\Delta E^*ab \leq 0.03$, the colorimeter can pass the inspection of an authoritative metrology institute.

Equipped with mobile App and PC software

The instrument can be used with mobile APP or PC software for online measurement, covering Android, iOS and Windows systems, to help users to data color management and generate test reports.

Support multi-channel color sharing

Enterprise users can import and export color data through the APP or PC software, manage their own color card information library and color formulas, and share the data through WeChat, QQ, email, etc. to the company or customers.

Multiple color spaces and color difference formulas

Provide multiple color spaces and color difference formulas for different industries, including Lab, LCh, ΔE^*ab and others.

Spectral reflectance curves

Provides professional spectral reflectance curves from which the user can obtain information on the hue, saturation and shade of the sample color.

Equipped with measurement positioning board

The colorimeter is equipped with a measurement positioning board to meet the needs of precise alignment, and make the measurement more accurate.

Whiteboard calibration

The bottom cover integrates a calibration white tile, so there is no need to worry about losing it. No need for tedious operation.

Easy to carry

Smart and portable, easy to store and carry; stable body, ergonomic design, measuring colors anytime, anywhere.

Advanced color sensor, Outstanding quality

The colorimeter adopts chip-level color sensor AS7261 newly launched by ams AG, whose precise XYZ tristimulus color sensing function simulates the human eye response curve of the standard observer defined in the CIE1931 and CIE1976 color systems.

Full spectrum LED light source

Adoption of full-spectrum LED light source ensures sufficient spectral distribution in the visible range, avoiding the spectral deficiency of white LEDs in specific wavelength bands.

45°/0 annular illumination

The instrument adopts 45/0 annular illumination, which eliminates the dependence on direction, can effectively eliminate the error between human eyes and colorimeter caused by the texture on the sample surface, and minimize the influence of texture.

APPLICATIONS

As it can measure larger areas to acquire more even color data with its large 20mm measuring aperture, it has wide application in color measurement and is widely used in industries of textiles, leather, fabrics and wood furniture.



Biolab Scientific Ltd.

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

Email: info@biolabscientific.com | Website: www.biolabscientific.com