



COLORIMETER BKH-601

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COLORIMETER WITH TOUCH SCREEN

This is a smart touchscreen colorimeter tailored for the printing industry. It features a 3.5-inch IPS color capacitive display for an excellent user experience. With a 4mm measuring aperture and D50 standard light source, it meets printing color detection standards and accurately reflects printed colors under standard conditions. The device includes multiple built-in color cards, enabling fast matching of the three closest color codes. It supports color difference comparison, various standard color input methods, adjustable color difference thresholds, flexible formula selection, and rapid QC detection.



4mm Measurement Aperture

Equipped with a 4mm measurement aperture, the instrument is ideal for precise color evaluation of small to medium-sized graphic areas such as printed materials, labels, and packaging samples. It minimizes edge interference and significantly enhances measurement accuracy.

Triangular support structure for precise positioning

A triangular support structure is arranged around the measurement hole, making it convenient to observe the alignment between the measurement hole and the area being measured. This design solves the problem of difficult precise alignment at the bottom of the colorimeter while also ensuring measurement stability.

D50 Standard Light Source for Printing

Uses a D50 light source meeting CIE and ISO standards to accurately reproduce pr

SPECIFICATIONS

Model	BKH-601
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	4mm
Measurement conditions	Light source D50, field of view 2°
Measuring time	About 1s
Color space	CIE Lab,LCh,Luv,Yxy,CMYK,RGB,YI-98,WI-98,WI-GanzWI-Hunter,WI-R457,HSL,HSV,ITA,Spectra
Color difference formula	ΔE^*ab , ΔE^*uv , ΔE^*94 , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, ΔE^*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	86mmx62.5mmx158mm
Weight	About 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)
Operating temperature range	0~45°C, 0~85%RH (no condensation)
Storage temperature range	-25~55°C, 0~85%RH (no condensation)
Supply Voltage	DC5V
Operating Current	120mA
Operating Power Consumption	600mW

Alt Name	Colorimeter with Touch Screen
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FEATURES

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D50 Standard Light Source for Printing

Uses a D50 light source meeting CIE and ISO standards to accurately reproduce printed colors under standard viewing conditions, ensuring the measurement results are more industry-oriented.

3.5-Inch Touch Screen for Easy Operation

Featuring a 3.5-inch high-definition touch screen with an intuitive interface, the device is user-friendly and quick to master-making professional color measurement simple and efficient.

Two-Step Color Comparison with Lab Bias Indicator

Complete color difference measurement in just two clicks, with clear Lab channel bias prompts to guide color mixing.

Built-In Multiple Industry-Standard Electronic Color Cards

Includes multiple standard electronic color cards and quickly matches the top 3 closest colors with over 90% accuracy, making it essential for printing proofing and quality control.

Large Storage Capacity with Cloud Sync

Offers ample storage for personalized color databases and industry-specific color cards. Data can be synced to the cloud, enabling seamless sharing across multiple devices for efficient color management.

Color Difference Comparison Without Physical Samples

Supports using stored historical colors, built-in color card libraries, or direct Lab and other color space inputs for comparison-eliminating concerns about sample aging and fading for greater flexibility and efficiency.

Powerful Mobile App and PC Software

Feature-rich app and PC software enable data sharing, history management, report export, and more, supporting versatile color difference management across multiple scenarios.

QC Detection Function Ensures Product Consistency

Set color difference thresholds to display pass/fail results based on ΔE values between standard and sample colors, helping to maintain consistent product color quality.

Repeatability $\Delta E^*_{ab} \leq 0.03$

The instrument has a repeatability of up to $\Delta E^*_{ab} \leq 0.03$, with excellent stability and can pass the inspection of the authoritative metrology institute.

Multiple Color Spaces and Difference Formulas

Offers various color spaces like Lab, RGB, CMYK, and multiple ΔE formulas including ΔE^*_{ab} and ΔE^*_{uv} .

Provide Spectral Reflectance Curve

Provide professional spectral reflectance curves to support in-depth color analysis, metamerism research, and special effect ink evaluation.

High-Precision Positioning Plate for Accurate Measurement

Equipped with a standard positioning plate to ensure precise alignment, effectively minimizing human error for more reliable data.

Ergonomic Design, Comfortable Grip

Designed according to hand holding habits, the body is light and easy to hold for a long time without fatigue.

Built-In Calibration White Board

Integrated into the instrument's bottom cover, the calibration white board eliminates the need to carry an extra one, preventing loss and ensuring consistent calibration with simple single-color operation.

Full-Spectrum LED Light Source

The full-spectrum LED light source has a long life and stable performance, ensuring sufficient spectral distribution in the visible light range and avoiding the lack of spectrum in specific bands of white light LEDs.

45°/0 optical path structure

Adopt the internationally accepted 45/0 (45°annular illumination, 0° viewing angle), SCI illumination observation conditions for more accurate measurement.



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