

## Spectrophotometric Colorimeter

### Application:

Spectrophotometric colorimeter is widely used in plastic, electronic, painting, coating, ink, textile, garment, printing and dyeing, food, medical, cosmetic, industries, scientific research institutes, schools and laboratories. It can measure reflectance spectrum and other color index precisely. BCM-810 spectrophotometer not only can help to perform color matching and color management studies, but also can control product quality management accurately. The instrument is equipped with high-end color management software which can connect PC to achieve more extension functions.



### Technical Parameters:

Model	BCM-810
Illumination/Observation System	d/8(diffused illumination, 8-degree viewing angle) Conforms to CIE No.15, GB/T 3978
Integrating Sphere Size	Φ58mm
Light Source	Combined LED sources
Sensor	Silicon photodiode array
Wavelength Range	400~700nm
Wavelength Pitch	10nm
Reflectance Range	0~200%
Measuring Aperture	Φ8mm
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, LAB&WI&YI
Color Difference Formula	$\Delta E^*ab$ , $\Delta E^*uv$ , $\Delta E^*94$ , $\Delta E^*cmc(2:1)$ , $\Delta E^*cmc(1:1)$ , $\Delta E^*cmc(l:c)$ , CIE2000 $\Delta E^*00$ , $\Delta E(h)$
Other Chromaticity Data	WI(ASTM E313, CIE/ISO, AATCC, Hunter), YI(ASTM D1925, ASTM 313), Metamerism index (Mt), Color strength color stain, Color fastness
Data	Metamerism Index (Mt), Color Strength Color Stain, Color Fastness
Observer	2°/10°
Illuminant	D65, D50, A, C, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12

Model	BCM-810
Display Data	Spectral value/Graph, Colorimetric value, Color difference value/Graph, Pass/Fail result, Color offset, Color simulation, Color index setting( $\Delta E^*94$ , $\Delta E^*cmc$ , $\Delta E^*2000$ ), Tolerance prompt, Reverse prompt, Time setting, Language setting, Restore factory setting
Measurement Time	1.5s
Repeatability	Spectral reflectance: Standard deviation within 0.1%(400~700nm: within 0.2%) Colorimetric value: Standard deviation within $\Delta E^*ab$ 0.04 (Measurement conditions: White calibration plate measured 30 times at 5 seconds intervals after white calibration was performed.)
Inter Instrument Agreement	Within $\Delta E^*ab$ 0.2 (Average for 12 BCRA Series II color tiles)
Battery	Li-ion battery. 2800 times within 8 hours.
Lamp Life	5 years, more than 1.6 million measurements
Display	3.5 inch TFT LCD, Capacitive touch screen
Interface	USB/RS-232
Data Memory	1000 Standards, 15000 Samples
Ambient Temp.	0~40°C (32~104°F)
Storage Temp.	-20~50°C (-4~122°F)
Standard Accessory	Power adapter, Li-ion battery, Operating instruction, CD-ROM (Containing management software), Data line, White and black calibration cavity, Protective cover and wrist strap
Optional Accessory	Universal test components, Micro printer, Powder test box
External Size(W*D*H)	90*77*230mm
Package Size(W*D*H)	460*250*380mm
Net Weight	600g
Gross Weight	9.5kg
Notes	The specifications are subject to change without notice