



## MULTI ANGLE SPECTROPHOTOMETER BMAS-1201

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Multi angle spectrophotometer is instrument with combine color imaging with multi-angle technology to deliver precise color measurements.

## BMAS-1201 MULTI ANGLE SPECTROPHOTOMETER

Multi-angle measurement  
More intuitive display  
Effect measurement discrimination function  
256 Image Element Double Array CMOS Image Sensor  
Adopt Full spectrum LED light source with blue enhancement  
Concave grating spectrophotometric technology  
Professional-grade white board  
Higher quality  
Ergonomics Novel and fashionable appearance design  
Color camera preview, can clearly observe the measured area  
Multiple color measurement space, multiple observation light sources  
Easily analyze data

## SPECIFICATIONS

Model	BMAS-1201
Measurement Geometry	3 measurement angles (3 illumination sources, 1 receivers)
Measure Angle	45° Receiver:45as25°,45as45°,45as110° Standards:ASTM D 2244,E 308,E 1164,E 2194, E2539,DIN 5033,5036,6174,6175-1,6175-2;ISO 7724, 11664-4 SAE J 1545
Light Source	Full spectrum LED light source with blue enhancement
Lamp Life	5 years, 3 million times measurements
Spectroscopic Mode	Concave Grating
Sensor	256 Image Element Double Array CMOS Image Sensor
Spectral Range	400-700nm
Wavelength interval	10 nm
Measurement Range	0~600%
Semiband Width	10 nm
Measuring Aperture	Φ12mm
color space	CIE LAB,XYZ,Yxy,LCh,βxy,DIN Lab99
Color Difference Formula	$\Delta E^*_{ab}$ , $\Delta E^*_{94}$ , $\Delta E^*_{cmc}(2:1)$ , $\Delta E^*_{cmc}(1:1)$ , $\Delta E^*_{00}$ , DIN $\Delta E_{99}$ , $\Delta E_{DIN6175}$
Other Colorimetric Index	Flop Index
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)
Display	Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset
Measuring Time	Approx. 1 second for one angle Approx. 3 seconds for all angles
Repeatability	Spectral reflectance: Standard deviation within 0.08% Chromaticity value: $\Delta E^*_{ab}$ 0.04 ( When a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Reproducibility	$\Delta E^* < 0.10$ ,avg on the gray tile of BCRA tile set $\Delta E^* < 0.25$ ,avg on the color BCRA tile set

Inter-instrument error	0.2ΔE*00(avg on reference Series II BCRA tile set)
Trigger mode	Pressure sensing trigger, button trigger, software trigger
Measuring Mode	Single measurement, average measurement (1-99), continuous measurement (1-99)
Locating Mode	Color camera preview
Operating Environment	10°C to 50°C, humidity does not exceed 85%, no condensation
Storage Environment	-20°C to 50°C, humidity does not exceed 85%, no condensation
Calibration	Built-in white board parameters, external white board, black light trap, color board
Calibration Interval	4 hours,8 hours,24 hours,Startup calibration
3.5-inch TFT color LCD, Capacitive Touch Screen	Interface
USB	Data Storage
1000 pcs Standards,4000 pcs Samples	Language
Simplified Chinese, Traditional Chinese, English	Standard Accessories
Power Adapter, USB Cable, User Guide,PC Software(download from the official website), Calibration Board, black light trap,Protective cap, wristband	Optional Accessory
Micro-printer	Dimension
195X83X128mm	Power
Weight	About 1Kg



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