

# COLORIMETERS



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A Colorimeter is a device that is designed to measure & quantify the absorption of distinct wavelengths of light across a range of solutions. When a monochromatic light passes through the colored solution, a specific portion of light is absorbed while rest is transmitted. Absorption depends on color intensity. In QC, colorimeters are used to check the consistent color of manufactured products such as paints, textiles, etc.

Used in Paint and Varnish Industry, Food and Publishing Industry.

Also known as Photo Spectrometer.

## LTMET13 COLORIMETER



### SPECIFICATIONS

Model	LTMET13-5	LTMET13-6	LTMET13-7	LTMET13-8
Optical Geometry	8°/D	45°/0°	8°/D	
Standards compliant	CIE No.15, GB/T 3978	CIE No.15, GB/T 3979	CIE No.15, GB/T 3980	CIE No.15, GB/T 3981
Sensor	Silicon Photoelectric Diode Array			
Measuring Aperture	Φ 8 mm flat, Φ 4 mm sharp	Φ 20 mm	Φ 4 mm flat, Φ 4 mm sharp	Φ 4 mm
Color Space	CIE LAB, LCh,XYZ, CIE RGB,CIE LUV	CIE LAB,XYZ, LCh	CIE LAB, Lch,XYZ	CIE LAB, LCh
Observer	CIE 10° Standard observer			
Illuminant	D65,A,C,D50,F2,F6,F7,F8,F10,F11,F12		D65	
Displayed Data	Chromaticity Values, Color Difference Values, Pass/Fail Result, Color Offset/Deviation Direction			
Measurement Time	1.5 s			
Repeatability	ΔE*ab 0.03	ΔE*ab Within 0.08 (average value for 30 times)	ΔE*ab 0.08	ΔE*ab 0.03
Inter-instrument agreement	ΔE*ab Within 0.4 (average value for measuring BCRA series II 12pcs palettes)			
Size	205x67x80 mm			206x67x80 mm
Weight	500 g	About 400g(including battery)		
Battery Performance	Rechargeable Li-on Battery, 3.7V@3200 m A h		Rechargeable Li-on Battery, 3.7 V @ 3200 mAh	
Lamp Life	5 years, more than 1.6 million measurements			
Display	TFT Color 2.8inch@ (16:9)			
Interface	USB			

Data Storage	Standard: 100, Sample: 20000		Standard: 100, Sample: 10000
Operating Environment	0~40 °C (32~104 °F)	1~40 °C (32~104 °F)	
Storage Environment	- 20~50 °C (-4~122 °F)		
PC Software	CQCS3 software		-
Standard Accessories	Power adapter, manual, quality management software (official website download), USB cable, wristband	-	Power adapter, manual, quality management software (official website download), USB cable, wristband
Optional Accessories	Micro Printer, Powder Test Box		



LTMET13-5



LTMET13-6



LTMET13-7



LTMET13-8

## LTMET13 COLORIMETER

Built-in white plate parameters. No need to calibrate each time which can perform measurement quickly.

Double Locating: Illuminating locating and precise cross locating.

Switchable Double Measurement End Face: Large stable end face and small concave-convex end face.

New 45°/0° Optical Path Design: Significantly improve the measurement stability and precision.

8mm Measuring Aperture.

Equipped with rechargeable high-capacity Li-ion battery. No need to purchase battery repeatedly.

Configure CQCS3 software. Connect PC computer to realize more functions.

Having got SCM Metrological Certification, CE Certification, and ISO9001 Quality Management System Certification.

Hand-head structure: small and convenient; make the measurement easier.

Exquisite appearance: adopts traditional and fashionable aesthetic designs.

### SPECIFICATIONS

Model	LTMET13-9	LTMET13-10
Optical Geometry	45°/0°	8°/D
Standards compliant	CIE No.15,GB/T 3978.	
Sensor	Silicon Photoelectric Diode Array	
Measuring Aperture	Φ8mm flat	Φ8mm flat and Φ4mm tip
Color Space	CIE LAB XYZ Lch	CIE LAB
Observer	CIE 10° Standard observer	
illuminant	D65	

Displayed Data	Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset/ Deviation direction	
Measurement Time	1.5 s	
Repeatability	$\Delta E^*ab$ within 0.08 (average value for 30 times)	$\Delta E^*ab$ 0.08
Inter-instrument agreement	$\Delta E^*ab$ Within 0.4 (Average value for measuring BCRA Series II 12pcs plattes)	
Operating Environment	0~40°C(32~104°F)	
Storage Environment	-20~50°C(-4~122°F)	
Battery Performance	Rechargeable Li-on Battery, 3.7 V @ 3200 mAh	
Lamp Life	5 years, more than 1.6 million measurements	
Display	TFT Color 2.8inch@ (16:9)	
Interface	USB	
Data Storage	Standards:100 samples: 20000	Standards:100 samples: 10000
PC Software	CQCS3 software	/
Standard Accessories	Power Adapter, manual, Quality management software (official website download), USB cable, Wristbands	
Optional Accessories	Micro Printer, powder test box	
Size	205x67x80 mm	
Weight	About 400g(including battery)	



**Labtare Analytical Instruments**

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