

ColorEye® XTH hand-held portable spectrophotometer

Performance Specifications



Color Measurement Features

Color Spaces

CIE 94	CMC	XYZ, xy
CIELCH	FMC-II	
CIELAB	Lab	

Illuminants

A	CWF (F2)	TL83
C	DLF (F7)	TL84
D50	NBF (F11)	TL85
D55	SPL D50	U30
D65	SPL D65	
D75	SPL D75	

Observers

2 degree 10 degree

Data Displays

Colorimetric Assessments Indices (*optional*)

Other Features

Averaging
Auto save
Auto standard selection
Battery status
Multi-lingual capability
Pass/fail indication
Shade search
Tolerancing

Optional Indices Packages

Paints & Plastics
Textiles

Repeatability (white tile) (typical) (maximum)	0.05 RMS ΔE CIELAB 0.10 RMS ΔE CIELAB
Inter-Instrument Agreement (typical) (maximum)	0.15 Avg. ΔE CIELAB** 0.25 Avg. ΔE CIELAB**
Illumination Lamp life	Pulsed Xenon D65 >3,000,000 flashes
Measurement Cycle Time	1 second
Spectral Range	360nm to 750nm
Wavelength Interval	10nm
Photometric Ranges (selectable)	0.0% to 120% reflectance 0.0% to 200% reflectance
Photometric Resolution	0.01%
Apertures Regular area of view (standard) Illuminated / Measured Small area of view (optional) Illuminated / Measured	10mm circular diameter / 05mm circular diameter 05mm circular diameter / 02mm circular diameter
Optical Configuration	Diffuse / 8° (illumination/ measurement) Simultaneous Specular Component Excluded / Specular Component Included 38mm diameter integrating sphere Dual beam
Dimensions Height Width Depth	19.5cm (7.7 inches) 8.0cm (3.1 inches) 7.0cm (2.8 inches)
Weight	.81kg (1.8 lbs.)
Temperature (operating)	10° C to 35° C
Relative Humidity (operating)	20 to 80%, non-condensing
Battery (Nickel Metal-Hydride) Life Charge time (idle) Charge time (in use) Power Conservation Charging	Up to 3000 - 4000 flashes per charge Less than 3 hours Less than 6 hours Automatic sleep mode Internal and external
Electrical Requirements	117 VAC/50-60 Hz 230 VAC/50-60 Hz
Serial Interface	RS-232 (2400-38400 baud)
Data Storage	500 records

All specifications given at 120% photometric range for regular area of view aperture.
**Average Delta E of 13 BCRA Series II ceramic standards relative to GretagMacbeth standardized values under lab conditions.



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