

SPECIFICATIONS

ColorQuest® XT

Measurement

Measurement Principle:	Dual-beam spectrophotometer
Geometry:	d/8° total transmission, d/0° regular transmission
Spectrometer:	256 element diode array and high resolution, concave holographic grating
Sphere Diameter:	152 mm (6 in)
Sphere Coating:	Spectrafect™
Port Size/Measured Area:	
Port Diameter/View Diameter in TTRAN transmittance modes	
Large Area View (LAV):	25 mm (1 in) illuminated/17.4 mm (0.685 in) measured
Port Diameter/View Diameter in RTRAN transmittance mode	
Large Area View (LAV):	17 mm (0.67 in) illuminated/17 mm (0.67 in) measured
Spectral Range:	400 nm - 700 nm
Wavelength Resolution:	< 3 nm
Effective Bandwidth:	10 nm equivalent triangular
Reporting Interval:	10 nm
Photometric Range:	0 to 200%
Photometric Resolution:	0.003% (0.01% reported)
Light Source:	Pulsed Xenon lamp, filtered to approximate D65
Number of Flashes per Measurement:	1
Lamp Life:	> 1,000,000 flashes, user replaceable
Measurement time:	< 1 second
Minimum Interval Between Measurements:	< 3 seconds
Transmission Modes:	Regular (RTRAN) and Total (TTRAN)
Transmission Compartment:	Open on 3 sides 10.2 cm D X 35.6 cm W x 16.5 cm H (4 in D x 14 in W x 6.5 in H)
Standards Conformance	
Transmittance:	CIE 15:2004, ASTM E 1164, DIN5033 Teil7 and JIS Z 8722 Condition E, G

Performance

Colorimetric Repeatability: (20 readings)	$\leq 0.05 \Delta E^*$ on air
Spectral Repeatability:	Standard deviation within 0.1%
Inter-instrument Agreement:	$\Delta E^* \leq 0.15$ CIELab (Avg) $\Delta E^* \leq 0.25$ CIELab (Max)

Firmware

Illuminant/Observer:	C/2° and D65/10°
Color Scales:	CIE L*a*b*, Hunter Lab, CIE XYZ, Yxy, CIE L*C*h
Color Difference Scales:	$\Delta L^*a^*b^*$, ΔLab , ΔYxy , ΔXYZ , ΔL^*C^*h
Color Difference Indices:	ΔE^* , ΔE , ΔE_{cmc}
Indices and Metrics:	APHA / PtCo/ Hazen, ASTM Color, Saybolt, Gardner, YI E313 Yellowness, ADMI, EBC, ASBC, CIE Y Transmission
Other:	Spectral Data (%T and Absorbance), Spectral Plot (%T and Absorbance)

Physical / Electrical

Dimensions:	Height: 49.5 cm (19.5 in) Width: 42.0 cm (16.5 in) Depth: 49.8 cm (19.6 in) Weight: 20.4 kg (45 lb)
Power:	100 to 240 VAC, 47 to 63 Hz 60 watts passive, 120 watts continuous use
Printer Output:	RS-232C serial, 9,600 baud
Operating Environment:	10 to 40° C (50 to 104° F), 10 to 90% RH, noncondensing
Storage Environment:	-21 to 66° C (-5 to 150° F), 10 to 90% RH, noncondensing
Standard Accessories:	<ul style="list-style-type: none">• Didymium check filter• Transmittance zero calibration plate• Power cord• Certificate of compliance• User's manual

For more information, please contact HunterLab at 703-471-6870, sales@hunterlab.com or visit www.hunterlab.com

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Specifications subject to change without notice