SPECIFICATIONS

MiniScan® EZ

MEASUREMENT

Measurement Principle:	Dual-beam spectrophotometer
Geometries:	• Diffuse/8° (specular component included) **OR** • Directional annular 45° illumination / 0° viewing (specular component excluded)
Spectrophotometer:	256 element diode array and high resolution, concave holographic grating
Sphere Diameter:	63.5 mm (2.5 in.) (diffuse/8° models)
Port Diameters/View Diameters	
45°/0° models:	LAV 31.8 mm (1.25 in) illuminated/25.4 mm (1 in) measured
Diffuse/8° models:	LAV 25.4 mm (1 in) illuminated/20.0 mm (0.8 in) measured
Specular Component:	Excluded on 45°/0° models, Included on Diffuse/8° models
Spectral Range:	400 nm - 700 nm
Spectral Resolution:	< 3 nm
Effective Bandwidth:	10 nm equivalent triangular
Reporting Interval:	10 nm
Photometric Range:	0 to 150 %
Light Source:	Pulsed Xenon Lamp
Flashes per Measurement:	1 flash
Lamp Life:	> 1 million flashes
Measurement Time:	< 1 second from button push to measurement 2 seconds from button push to data display
Minimum Interval between Measurements:	3 seconds
Standards Conformance:	CIE 15:2004, ISO 7724/1, ASTM E1164, DIN 5033 Teil 7 and JIS Z 8722 Condition C
Standards Traceability:	Instrument standard assignment in accordance with National Institute of Standards and Technology (NIST) following practices described in CIE Publication 44 and ASTM E259

Hunter Associates Laboratory Inc., 11491 Sunset Hills Road, Reston, VA 20190-5280
Tel 703.471.6870 • Fax 703.471.4237 • sales@hunterlab.com • www.hunterlab.com

PERFORMANCE

Inter-Instrument Agreement:	ΔE*≤ 0.15 CIE L*a*b* (Avg) on BCRA II Tile Set ΔE*≤ 0.25 CIE L*a*b* (Max) on BCRA II Tile Set
Colorimetric Repeatability: (20 Readings)	ΔE*≤ 0.05 CIE L*a*b* on white tile

FIRMWARE

Data Views:	Color Data, Color Difference Data, Tristimulus Color Plot, Spectral Data, Spectral Difference Data, Spectral Plot, Spectral Difference Plot
USB Flash Drive Features:	Backup of Setups and Data, Setup Transfer to Multiple Units, Data Export to Excel
Other Features:	Pass/Fail, Average Multiple Readings, Search for Closest Standard
Illuminants:	A, C, D50, D55, D65, D75, F2, F7, F11
Observers:	2° and 10°
Color Scales:	CIE L*a*b*, Hunter Lab, CIE L*C*h, CIE Yxy, CIE XYZ
Color Difference Scales:	ΔL*a*b*, ΔLab, ΔL*C*H, ΔYxy, ΔXYZ
Color Difference Indices:	ΔE*, ΔE, ΔC*, ΔC and ΔEcmc
Indices and Metrics:	E313 Whiteness and Tint(C/2° and D65/10°), E313 Yellowness (C/2° and D65/10°), D1925 Yellowness (C/2°), Y Brightness, Z%, 457 nm Brightness, Opacity, Color Strength Average and Single Wavelength), Gray Change, Gray Stain, Metamerism Index, Shade Number
Data Storage:	As Standard - 100 spectral or tristimulus with Pass/Fail tolerances as Working, Physical, Numeric and Hitch As Sample - 750 spectral
Languages:	Chinese, English, French, German, Italian, Japanese, Spanish

PHYSICAL / ELECTRICAL

Dimensions:	Height: 13.9 cm (5.5 in.) Width: 10.9 cm (4.3 in.) Depth: 26.7 cm (10.5 in.) Weight: 1 kg (2.2 lbs) with batteries
Display:	5.8 cm x 5.8 cm (2.3 in. x 2.3 in.) backlit LCD, blue monochrome
Interface:	USB 2.0
Power:	Six AA-size alkaline batteries or nickel-metal-hydride rechargeable batteries
Battery Performance:	With alkaline batteries approximately 4,000 measurements With nickel-metal-hydride batteries approximately 4,000 measurements when fully charged (varies with battery condition)
Operating Environment:	10° to 40°C (50° to 104° F), 10 % to 90 % RH, noncondensing
Storage Environment:	-20° to 65°C (-5° to 150° F), 10 % to 90 % RH, noncondensing
Standard Accessories:	• NiMH batteries • Battery charger • Calibrated instrument white tile • Certificate of traceability • Black glass (45°/0° models) or Light trap (diffuse/8° models) • Green diagnostic tile (all instrument standards are contained in a single ergonomic holder) • Dust cover • Carrying case • USB flash drive • MiniScan EZ Users guide

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

MiniScan is a Trademark of Hunter Associates Laboratory, Inc.
Specifications subject to change without notice