

SPECIFICATIONS

SpectraTrend® HT

MEASUREMENT

Measurement Principle:	Dual-beam spectrophotometer
Geometry:	0°/ 30° typical
Spectrophotometer:	Sealed optics; 256-element diode array; high resolution concave holographic grating
View Diameter:	25.4 mm (1 in) (at 3.5-inch from sensor window)
Specular Component:	Excluded
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:	Full spectrum, balanced solid state LED system
Flashes per Measurement:	5-6 flashes
Lamp Life:	5 years typical
Minimum Interval between Measurements:	1 second
Height Resolution:	1 mm or 0.1 in
Working Range:	65 mm - 115 mm (2.5 in. - 4.5 in.)

PERFORMANCE

Inter-Instrument Agreement:	$\Delta E^* < 0.30$ CIE L*a*b* (Avg) on BCRA II Tile Set
Colorimetric Repeatability: (20 Readings)	$\Delta E^* < 0.05$ (Max)/0.03 (Avg) 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
Other Features:	Pass/Fail, Average Multiple Readings
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:	$\Delta L^*a^*b^*$, ΔLab , ΔL^*C^*H , ΔL^*C^*h , ΔYxy , ΔXYZ
Color Difference Indices:	ΔE^* , ΔE , ΔC^* , ΔC and ΔE CMC
Indices and Metrics:	E313 Whiteness Index, Tint, E313 Yellowness Index, D1925 Yellowness Index, Y Brightness, Z%, 457 nm Brightness, Baking Contrast Units, Colorant Strength (Average and Single Wavelength), Gray Change, Gray Stain, dc^* , dc , Metamerism Index, Shade Number
Data Storage:	As Standard - 250 spectral or tristimulus with Pass/Fail tolerances as Working, Physical, Numeric and Hitch
Languages:	Chinese, English, French, German, Italian, Japanese, Spanish

Physical / Electrical

Sensor Dimensions:	Height: 24 cm (9.3 in.) Width: 20 cm (7.8 in.) Depth: 11 cm (4.3 in.) Weight: 4.5 kg (9.9 lbs)
Support Unit Dimensions:	Height: 25.4 cm (10 in.) Width: 20.3 cm (8 in.) Depth: 16.5 cm (6.5 in.) Weight: 6.75 kg (15 lbs)
Display:	7.1 cm x 5.4 cm (2.8 in. x 2.1 in.) backlit color LCD
Interface:	Ethernet (RJ45)
Power:	100 to 240 VAC, 47 to 63 Hz
Operating Environment:	0° to 50°C (32° to 122° F), 10 % to 90 % RH, noncondensing
Storage Environment:	-20° to 65°C (-5° to 150° F), 10 % to 90 % RH, noncondensing
Standard Accessories:	• Calibrated instrument white tile • Certificate of Traceability • Black glass • Green diagnostic tile • Calibration Box • 20 m Ethernet Cable • 10 m Sensor Power & DIO Cable • Crossover Adaptor • SpectraTrend HT User guide

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