

# SPECIFICATIONS

## SpectraTrend® HT

### Measurement

---

<b>Measurement Principle:</b>	Dual-beam spectrophotometer
<b>Geometry:</b>	0°/ 30° typical
<b>Spectrophotometer:</b>	Sealed optics; 256-element diode array; high resolution concave holographic grating
<b>View Diameter:</b>	25.4 mm (1 in) (at 3.5-inch from sensor window)
<b>Specular Component:</b>	Excluded
<b>Spectral Range:</b>	400 nm - 700 nm
<b>Spectral Resolution:</b>	< 3 nm
<b>Effective Bandwidth:</b>	10 nm equivalent triangular
<b>Reporting Interval:</b>	10 nm
<b>Photometric Range:</b>	0 to 150 %
<b>Light Source:</b>	Full spectrum, balanced solid state LED system
<b>Flashes per Measurement:</b>	5-6 flashes
<b>Lamp Life:</b>	5 years typical
<b>Minimum Interval between Measurements:</b>	1 second
<b>Height Resolution:</b>	1 mm or 0.1 in
<b>Working Range:</b>	65 mm - 115 mm (2.5 in. - 4.5 in.)

### Performance

---

<b>Inter-Instrument Agreement:</b>	$\Delta E^* < 0.30$ CIE L*a*b* (Avg) on BCRA II Tile Set $\Delta E^* < 0.50$ CIE L*a*b* (Max) on BCRA II Tile Set
<b>Colorimetric Repeatability:</b> (20 Readings)	$\Delta E^* < 0.05$ (Max)/0.03 (Avg) CIE L*a*b* on white tile

## Firmware

---

<b>Data Views:</b>	Color Data, Color Difference Data, Tristimulus Color Plot, Spectral Data, Spectral Difference Data, Spectral Plot, Spectral Difference Plot
<b>Other Features:</b>	Pass/Fail, Average Multiple Readings
<b>Illuminants:</b>	A, C, D50, D55, D65, D75, F2, F7, F11
<b>Observers:</b>	2° and 10°
<b>Color Scales:</b>	CIE L*a*b*, Hunter Lab, CIE L*C*h, CIE Yxy, CIE XYZ
<b>Color Difference Scales:</b>	$\Delta L^*a^*b^*$ , $\Delta Lab$ , $\Delta L^*C^*H$ , $\Delta L^*C^*h$ , $\Delta Yxy$ , $\Delta XYZ$
<b>Color Difference Indices:</b>	$\Delta E^*$ , $\Delta E$ , $\Delta C^*$ , $\Delta C$ and $\Delta E$ CMC
<b>Indices and Metrics:</b>	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
<b>Data Storage:</b>	As Standard - 250 spectral or tristimulus with Pass/Fail tolerances as Working, Physical, Numeric and Hitch
<b>Languages:</b>	Chinese, English, French, German, Italian, Japanese, Spanish

## Physical / Electrical

---

<b>Sensor Dimensions:</b>	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)
<b>Support Unit Dimensions:</b>	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)
<b>Display:</b>	7.1 cm x 5.4 cm (2.8 in. x 2.1 in.) backlit color LCD
<b>Interface:</b>	Ethernet (RJ45)
<b>Power:</b>	100 to 240 VAC, 47 to 63 Hz
<b>Operating Environment:</b>	0° to 50°C (32° to 122° F), 10 % to 90 % RH, noncondensing
<b>Storage Environment:</b>	-20° to 65°C (-5° to 150° F), 10 % to 90 % RH, noncondensing
<b>Standard Accessories:</b>	<ul style="list-style-type: none"><li>• Calibrated instrument white tile</li><li>• Certificate of Traceability</li><li>• Black glass</li><li>• Green diagnostic tile</li><li>• Calibration Box</li><li>• 20 m Ethernet Cable</li><li>• 10 m Sensor Power &amp; DIO Cable</li><li>• Crossover Adaptor</li><li>• SpectraTrend HT User guide</li></ul>

For more information, please contact HunterLab at 703-471-6870, [sales@hunterlab.com](mailto:sales@hunterlab.com) or visit [www.hunterlab.com](http://www.hunterlab.com)

---