

# SPECIFICATIONS

## LabScan® XE

### Measurement

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| <b>Measurement Principle:</b>                 | Dual-beam spectrophotometer   |
| <b>Geometry:</b>                              | Directional 0° illumination / 45° circumferential viewing with 15-station fiber optic ring  |
| <b>Spectrophotometer:</b>                     | 256 element diode array and high resolution, concave holographic grating  |
| <b>Orientation:</b>                           | Measurement port up or port forward; port down with optional stand  |
| <b>Viewing Apertures</b>                      |   |
| Large Area View Model:                        | 44 mm (1.75 in.) illuminated;<br>50 mm (2 in.) measured   |
| Variable Sample Illumination (VSI) Model:     | 44 mm (1.75 in.), 25 mm (1.00 in), 13 mm (0.50 in), 6 mm (0.25 in) and 3 mm (0.13 in) illuminated;<br>50 mm (2 in.), 30 mm (1.20 in), 17 mm (0.70 in), 10 mm (0.40 in), and 5 mm (0.20 in) measured |
| <b>Lens Zoom for VSI Option:</b>              | Automatic   |
| <b>Port Sensing for VSI Option:</b>           | Automatic sensing of port plate size  |
| <b>Specular Component:</b>                    | Excluded  |
| <b>Spectral Range:</b>                        | 400 nm - 700 nm   |
| <b>Wavelength Resolution:</b>                 | < 3 nm  |
| <b>Effective Bandwidth:</b>                   | 10 nm equivalent triangular   |
| <b>Reporting Interval:</b>                    | 10 nm   |
| <b>Photometric Range:</b>                     | 0 % -150 %  |
| <b>Photometric Resolution:</b>                | 0.003 % (0.01 % reported)   |
| <b>Light Source:</b>                          | Pulsed Xenon lamp, filtered to approximate D65 daylight   |
| <b>Lamp Life:</b>                             | 1 billion flashes   |
| <b>Measurement Time:</b>                      | < 3 seconds (except 3 mm area <10 seconds)  |
| <b>Minimum Interval between Measurements:</b> | 3 seconds   |

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| <b>Reference Standardization:</b>   | Automatic to internal reference standard  |
| <b>Automatic UV Control Option:</b> | 420 nm cutoff filter for UV control and UV exclusion  |
| <b>Standards Conformance:</b>       | CIE No.15:2004, ISO7724/1, ASTM E1164, DIN 5033 Teil 7 and JIS Z 8722 Condition C                       |
| <b>Standards Traceability:</b>      | Instrument standard calibration traceable to the National Institute of Standards and Technology (NIST). |

## Performance

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| <b>Colorimetric Repeatability:</b><br>(20 readings, Max) | For white tile: $\Delta E^* < 0.09$ for 44 mm (1.75 in.)<br>For blue denim tile: $\Delta E^* < 0.07$ for 44 mm (1.75 in.) |
| <b>Inter-Instrument Agreement:</b>                       | $\Delta E^* < 0.15$ (Avg) for 44 mm (1.75 in.)<br>$\Delta E^* < 0.36$ (Max) for 44 mm (1.75 in.)                          |

## Physical / Electrical

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| <b>Dimensions:</b>            | Height: 30.5 cm (12 in.)<br>Width: 19.1 cm (7.5 in.)<br>Depth: 36.9 cm (14.5 in.)<br>Weight: 10.4 kg (23 lbs)   |
| <b>Power:</b>                 | 100 to 240 VAC, 47 to 63 Hz<br>90 watts passive, 180 watts continuous use   |
| <b>Interface:</b>             | RS-232C, 9,600 baud, D9 (female) terminal   |
| <b>Operating Environment:</b> | 10° - 40° C (50° - 104° F), 10 % - 90 % RH, noncondensing   |
| <b>Storage Environment:</b>   | -21° - 66° C (-5° - 150° F), 10 % - 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>• White backing tile</li> <li>• LAV port plate</li> <li>• RS-232C cable</li> <li>• USB-to-Serial adapter</li> <li>• Power cord</li> <li>• EasyMatch QC software</li> <li>• EasyMatch QC Basic manual</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)