

SPECIFICATIONS

Agera®

MEASUREMENT

Measurement Principle:	Dual-beam Reflectance Spectrophotometer
Geometry:	0°/45° circumferential
Measurement Method:	Port up or Port forward
Read Time:	< 3 sec.
Gloss:	60° (ASTM D523 Compliant)
Image Capture:	High Resolution, D65 illuminated, 45°/0° image viewing, image capture and image recall with RGB Histogram display for image analysis
Area Measured:	LAV 2 - 51 mm (2 in), LAV 1 - 25.4 mm (1 in), SAV - 16.9 mm (5/8 in) dependent on port plate used

TECHNICAL

Illumination Range:	360 nm - 700 nm
Spectral Range:	400 nm - 700 nm
Specular Component:	Excluded
Spectral Resolution:	< 3 nm
Effective Bandwidth:	10 nm equivalent triangular
Reporting Interval:	10 nm
Photometric Range:	0 to 150 %
UV Control:	Excluded; Included - factory calibrated; Included - user calibrated. Automated comparative data viewing and reporting.
Light Source:	Full spectrum, balanced LED array
LED Life:	5 years typical
Spectrophotometer:	Sealed optics; 256-element diode array; high resolution concave holographic grating

PERFORMANCE

Inter-Instrument Agreement:	$\Delta E_{2000} < 0.15$ CIE L*a*b* (Avg) on CCSII (CERAM) Tile Set
Colorimetric Repeatability:	$\Delta E_{2000} < 0.03$ CIE L*a*b* (Max) on white tile

QUALITY CONTROL SOFTWARE

ON-BOARD EASYMATCH ESSENTIALS COLOR QUALITY CONTROL SOFTWARE

Data Views:	EZ View, Color Data Table, Color Difference Data, Lab Color Plot, Spectral Data, Spectral Plot, Trend Plot
Other Features:	Pass/Fail color indication, time and date stamp, auto-naming, auto-saving, data backup and recovery
Indices and Metrics:	E313 Whiteness Index, Tint, E313 Yellowness Index, D1925 Yellowness Index, Y Brightness, Z%, 457 nm Brightness, Baking Contrast Units, HCCI, SCCA, ASTM E1349, E308
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 , ΔYxy , ΔXYZ
Color Difference Indices:	ΔE^* , ΔE , ΔC^* , ΔE CMC, ΔE 2000
Data Storage:	8 GB (recommended storage of 1000 records max, unless consistently backed up)
Illuminants:	A, C, D50, D55, D65, D75, F02, F07, F11
Observers:	2° and 10°
Languages:	English
External PC Software:	Compatible with HunterLab EasyMatch QC and EasyMatch QC-Electronic Records Quality Control Software

COMMUNICATIONS I/O

USB OTG:	Connectivity to printer, keyboard, mouse
Front Panel USB:	2.0 bidirectional, data export/import via thumb drive
Ethernet RJ45:	Print directly to standalone or network printers Email directly from the instrument Stream data to LIMS and SPC systems
Wi-Fi:	Available
Bluetooth:	Available
External Inputs:	Remote Footswitch or similar closed contact switching device
Remote Access Support:	Enabled via internet-based support tool

PHYSICAL / ELECTRICAL

Sensor Dimensions:	Height: 28 cm (11 in) Width: 22 cm (8.75 in) Depth: 31 cm (12.25 in) Weight: 6.35 kg (14 lb)
Display:	Touch screen, high resolution color, 17.8 cm (7 in), 1280 x 800
Power:	Input: 100 to 240 VAC, 47 to 63 Hz to universal power supply @ 24 VDC (3.75A 90W)
Operating Environment:	4° to 38°C (40° to 100° F), 10 % to 85 % RH, noncondensing
Storage Environment:	-20° to 65°C (-5° to 150° F), 10 % to 90 % RH, noncondensing
System Components:	<ul style="list-style-type: none">• Agera sensor• LAV 2 - 51 mm (2 in), LAV 1 - 25.4 mm (1 in), SAV 16.9 mm (5/8 in) port plates• Calibrated white tile (NIST Certificate of Traceability)• Calibrated black glass standard• Green diagnostic tile• 100V - 240V universal power supply• Agera Quick Start Guide• Agera User's guide on CD

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