

**Compact**  
**Powerful**  
**Precise**



# ColorFlex<sup>®</sup> L2 Citrus

*Level UP your Color Confidence with the new  
ColorFlex L2 Citrus Spectrophotometer.*

**As simple as you want, as powerful as you need.**

Elevate your color accuracy and user experience like never before. Compact and ergonomic build requires minimal space while offering enhanced durability and reliability. Designed to streamline and expedite your quality control processes, the ColorFlex L2 Citrus measures Citrus Number (CN), Citrus Redness (CR), and Citrus Yellowness (CY) with unparalleled accuracy.



# Explore the Next-Gen ColorFlex®...L2 Citrus



## #1 Color Measurement Solution for Citrus Products

**Citrus Standard and Accessories:** Easy and accurate citrus color measurement with tailor-made accessories, including Calibrated Orange Juice 4 Standard and Orange Juice Tube Holder.



## All the Citrus Scores and Indices You Need

**Immediate Measurement:** The ColorFlex L2 Citrus is specifically designed to measure the color of fresh and concentrated orange, grapefruit, and lemon juice. Includes all the citrus scores and indices you need, Citrus Number (CN), Citrus Redness (CR), and Citrus Yellowness (CY).

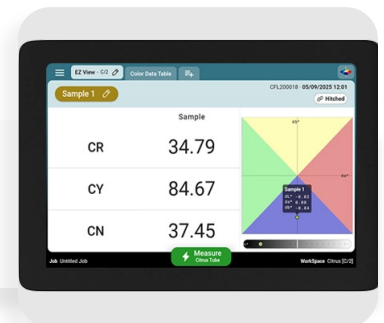
## Modern Smart User Interface with Touchscreen Color Display

**Durable and Efficient:** Facilitates accurate color measurement in seconds, with a robust industrial glass design suitable for harsh environments.



## New & Improved Color Software

**Essentials 2.0:** Take precise and reliable color measurement in seconds with next-gen user-friendliness and seamlessly analyze multiple tristimulus and spectral data sets. It's that powerful.

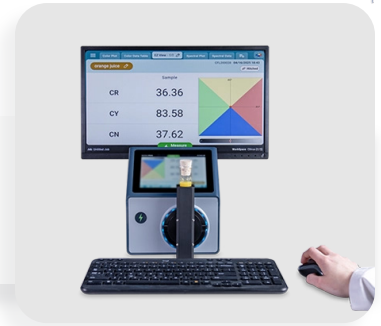


# CITRUS



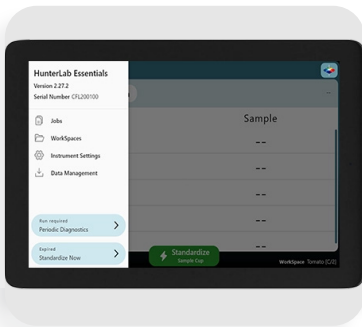
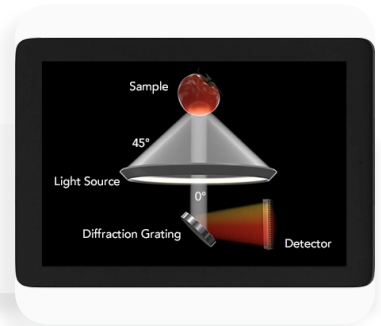
## Powerful Standalone Functionality

**No computer required:** With huge onboard processing and storage capacity, ColorFlex L2 Citrus can function as an independent color workstation. Connect monitor, keyboard, and mouse if desired.



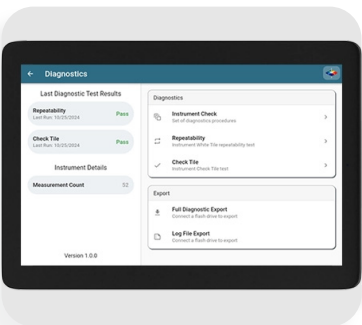
## 45°a:0° Annular Illuminated Optical Geometry

**Superior Consistency and Color Accuracy:** Enhancing the efficiency of Quality Control workflows and delivery of superior quality products repeatedly.



## Self-Guided and Intuitive Out-of-Box Startup

**Time-Saving and User-Friendly:** Ready to use straight out of the box with an integrated wizard for quick training, reducing operator time and easing concerns related to staff training and turnover.



## Built-in Advanced Diagnostics

**On-Board Diagnostic Health Check:** Ensures the HunterLab ColorFlex L2 Citrus is always operating at peak performance, continuing to build on the legendary history of reliability of the ColorFlex family of instruments.

# CITRUS



## Advanced Data Export and Communication

**Full Suite of Data Communication Options:** Features Ethernet and USB port for easy data export and printing. HDMI and additional USB port for mouse, keyboard and other accessories.

## Connectivity with LIMS and SPC systems

**Simplifies QC workflows:** Aids in trend analysis and workflow simplification across manufacturing sites.



# CONTACT US

We've worked with thousands of companies, but you'll feel like our one and only. If color accuracy is crucial to your business, you've come to the right place—with the right people. Let's get in touch. Ask a question, Request a quote or just say hello!

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# SPECIFICATIONS



# ColorFlex<sup>®</sup> L2 Citrus

## MEASUREMENT

<b>Measurement Principle:</b>	Port forward dual-beam spectrophotometer
<b>Geometry:</b>	45°a:0° Annular Illuminated Optics, ASTM E1164
<b>Spectrophotometer:</b>	Sealed optics; 256-element diode array and a high resolution concave holographic grating
<b>Port Diameter/View Diameter:</b>	31.8 mm (1.25 in) illuminated/ 25.4 mm (1 in) measured
<b>Specular Component:</b>	Excluded
<b>Spectral Range:</b>	Range: 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 Xenon Flash Lamp
<b>Measurement Duration:</b>	1 second
<b>Lamp Life:</b>	10 years typical
<b>Illumination:</b>	Factory Calibrated Xenon for Brightness, Whiteness, and Tint
<b>Standards Conformance:</b>	CIE 15:2018, ASTM E1164, DIN 5033, Teil 7 and JIS Z 8722 Condition C
<b>Standards Traceability:</b>	Instrument standard assignment in accordance with National Institute of Standards and Technology (NIST) following practices described in CIE Publication 44 and ASTM E259

## PERFORMANCE

<b>Inter-Instrument Agreement:</b>	Color: $\Delta E^*_{2000} < 0.15$ D65/10 (Avg) on BCRA CCSII Tile
<b>Colorimetric Repeatability:</b>	Color: $\Delta E^* < 0.05$ D65/10 (Max) on White Tile



## USER INTERFACE

<b>Data Views:</b>	Color Data, Spectral Plot, EZ View, Spectral Data Table, 2D-Color Plot, Pass/Fail Color Indication, Time, and Date Stamp, Auto-naming, Auto-saving, Data backup
<b>USB Flash Drive Features:</b>	Job Data, Screen Capture and Database Export
<b>Other Features:</b>	Pass/Fail, Average Multiple Measurements, Set Multiple Automatic Measurements, Auto Export Data, Network Connectivity
<b>Illuminants:</b>	A, C, D50, D55, D65, D75, F02, F07, 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, Rd,a,b
<b>Color Differences:</b>	$\Delta L^*a^*b^*$ , $\Delta Lab$ , $\Delta L^*C^*h$ , $\Delta Yxy$ , $\Delta XYZ$ , $\Delta E$ , $\Delta E^*$ , $\Delta E^*2000$ , $\Delta H^*$ , $\Delta C^*$ , $\Delta E_{cmc}$ , $dRdab$
<b>Indices and Metrics:</b>	E313 Whiteness and Tint (C/2°, C/10°, D65/2° or D65/10°), E313 Yellowness (C/2°, C/10°, D65/2° or D65/10°), D1925 Yellowness (C/2°), Y Brightness, Z%, 457 nm Brightness, Opacity, Color Strength (Average and Single Wavelength), Gray Scale, Gray Stain, Metamerism Index
<b>Citrus Color Model Only:</b>	Citrus Number, Citrus Redness, Citrus Yellowness
<b>Data Storage:</b>	1 million Records max; 8 GB
<b>Languages:</b>	Supports multiple languages—with the option to add more as needed

## PHYSICAL / ELECTRICAL

<b>Dimensions:</b>	Height: 16 cm (6.25 in.) Width: 21 cm (8.75 in.) Depth: 24 cm (9.50 in.) Weight: 2.75 kg (6 lbs)
<b>Display:</b>	7" Touch screen, high resolution 1280x800
<b>Interface:</b>	2 USB ports, HDMI Video Output, Foot switch Input, Ethernet connection, USB Service Port, Convenient physical measurement/action button
<b>Power:</b>	90 – 240 VAC, 47 – 63 Hz to universal power supply @ 24 VDC/3.75A
<b>Operating Environment:</b>	10° to 30°C (50° to 86° F), 10 % to 90 % RH, noncondensing
<b>Storage Environment:</b>	-20° to 65°C (-4° to 149° F), 10 % to 90 % RH, noncondensing
<b>Standard Accessories:</b>	<ul style="list-style-type: none"> <li>• Calibrated Orange Juice 4 Standard</li> <li>• Calibrated Instrument Standard (White Tile) with Certificate of Traceability</li> <li>• Diagnostic Check Tile (Green Tile)</li> <li>• Reflectance Black Glass</li> <li>• Orange Juice Tube Holder with 19.05mm (0.75 in) port plate</li> <li>• Port Plate - 31.8 mm (1.25 in)</li> <li>• Power Supply (90W)</li> <li>• Quick Start Guide</li> </ul>

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