

## Tru-Image™ 2D Imaging Colorimeter Solutions

Reference Grade

High Resolution

High-Speed

# PHOTO RESEARCH<sup>®</sup>

The Reference in Color and Light Measurement Solutions



# Tru-Image™ 2D Imaging Colorimeter Solutions

In the mid-1980's, Photo Research pioneered the first commercially available 2D imaging colorimeter, the PR-900. Since then, this technology has become an essential solution for reducing the time it takes to analyze devices requiring a multitude of measurements such as automotive and aerospace displays / clusters with time savings being realized in the R&D, QC and production spaces. The Tru-Image™ series of 2D Imaging colorimeters are Reference grade, High Resolution, High-Speed (color measurements in under 4 seconds total cycle time) solutions at an extremely compelling value.

## H A R D W A R E

The Tru-Image series is available in 2 versions – TRU8 (8 megapixel)

- Low noise, thermoelectrically-cooled detector
- High-speed CIE filter wheel
- USB 2.0 Interface
- High quality objective lens (custom lens configurations available)

## S O F T W A R E

Included in the price of each Tru-Image solution is an updated version of VideoWin 3 Pro software, a versatile Windows based control and analysis application that provides functionality designed to take the difficulty out of your measurement tasks.

Features include:

- Automatic average, min and max luminance of characters
- Unlimited number of Areas of Regard (analysis regions) – Rectangular, ellipsoidal or polygonal
- Spatial analysis
- Matrix color correction
- Pseudo color display
- Automatic integration with PRI spectroradiometers for sample matrix calibration
- User calibration to UUT
- 3D luminance
- Auto Shape Find
- Export to Excel
- Line profiling
- Macro programming
- Fiducial registration

## M E A S U R I N G   C A P A B I L I T I E S

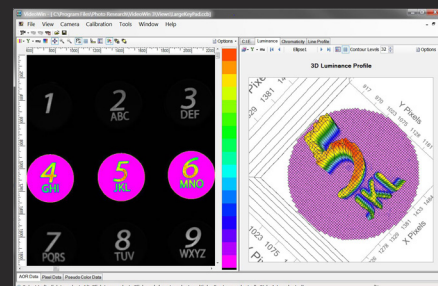
- Luminance (Average, min., max.)
- Correlated Color Temperature (CCT)
- $\Delta E^*$
- CIE 1931 x,y, CIE 1976 u\*v',
- $L^*a^*b^*$
- Dominant wavelength

## S P E C I F I C A T I O N S

Specifications	TRU8
CCD Type	Cooled Interlaced
CCD Dynamic Range	15 bit
Resolution	8 MPixels (3,296 x 2,472)
Pixel Size (minimum resolution)	5.5 x 5.5 $\mu$ m
Minimum Measuring Size	27.5 x 27.5 $\mu$ m (using 5 x 5 pixels)
FOV (@1:1 magnification)	18.13 x 13.59 mm
Luminance Range	0.008 to 5,000 (higher with ND filters)
Luminance Accuracy (for Illuminant A)	$\pm 2\%$ @ 100 cd/m2
Luminance (measuring sample) *	$\pm 1\%$ @ 100 cd/m2
Measurement Time @ 100 cd/m2	Lum.: 1 sec. Color: 4 secs.
Color Accuracy (against Illuminant A)	$\pm 0.0015$ CIE 1931 x,y
Color Accuracy (measuring sample) *	$\pm 0.0015$ CIE 1931 x,y
Interface	USB 2.0
Power Consumption	12V, 3.8A
Supply Power	100 240 VAC 50-60 Hz
Operating Temperature	5° - 35° C Non-condensing

\*Sample measurement accuracies are relative to the reference instrument used during the matrix calibration process.

## V I D E O W I N   3 S C R E E N C A P T U R E



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