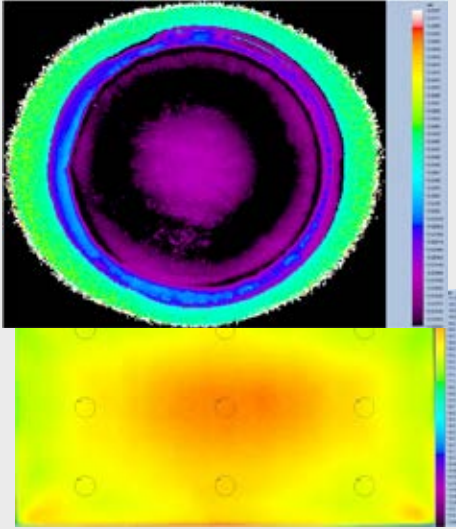


## ProMetric® G

Imaging Colorimeter



Measurement results for illumination measurement and ANSI brightness test for FPD display uniformity. The ProMetric G2 imaging colorimeter is ideally suited for FPD production testing and characterization as well as light source and lighting system characterization.

### ProMetric G Highlights

- Optimized for accuracy, precision and ease of use
- Color and light measurements that are highly correlated with human visual perception
- Incorporates industry-first Smart Technology™ innovations
- Flexible system, capable of addressing multiple applications now and in the future
- Works seamlessly with Radiant Vision Systems TrueTest™ automated optical inspection systems

## The most versatile and easiest to use imaging colorimeter - ever.

The Radiant Vision Systems ProMetric G Series delivers repeatable measurement accuracy and unmatched ease of use. It offers an excellent balance of wide dynamic range, high spatial resolution, large field of view and speed. ProMetric G is ideal for use in a variety of environments, including engineering, quality assurance and production testing.

ProMetric G2 provides 14-bit measurements using a scientific grade thermoelectrically cooled full-frame CCD sensor with a 1,536 x 1,024 pixel resolution. G2 is optimized for spatial color and light measurements on light fixtures, light sources, flat panel displays and projection displays.

ProMetric G3 offers higher resolution with a 3,072 x 2,048 pixel sensor. G3 is ideally suited for finding FPD pixel defects, measuring the brightness and color of individual LED or OLED pixels / sub-pixels and resolving small features on instrument panels and illuminated keyboards..

ProMetric G incorporates industry-first **Smart Technology™** innovations, including:

**Smart Control™** for fast, precise setup: Smart Control allows you to electronically adjust both focus and aperture settings for your lens. This eliminates the need to make manual adjustments, and allows for precise measurement setup.

**Smart Touch™** for full control at the imaging colorimeter: The ProMetric G includes a touch-sense user interface on the case. Now you can complete your measurement setup and acquisition, and review measurement results at the imaging colorimeter.

**Smart Calibration™** for automatic high-accuracy results: The ProMetric G is available with a variety of electronically controlled lenses. Each lens is calibrated over a wide range of working distances and aperture settings. The ProMetric G system monitors focal distance and aperture settings and automatically applies the flat field calibration. This greatly simplifies setup and ensures accurate measurement results.

Every ProMetric G system includes Radiant Vision Systems ProMetric software with API support, which provides complete measurement control and an extensive suite of image analysis functions. Optional TrueTest and PM-KB software offer an even greater set of automated test capabilities. ProMetric G is backed by the industry's best product warranty, including direct access to the Radiant Vision Systems technical support team to maximize performance in your application.



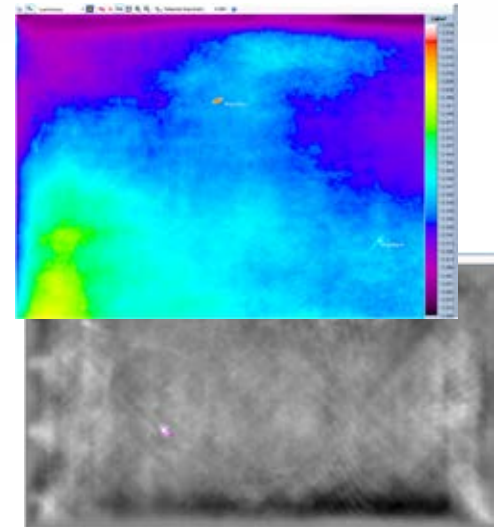
## Key Features

- 14-bit, full frame, thermoelectrically cooled CCD sensor
- CIE matched color filters and neutral density filters
- Supports a range of lenses with different FOV
- Smart Calibration provides accurate results over a wide range of distance and aperture settings
- Smart Touch user interface
- ProMetric control and analysis software

## Specifications

Specifications	ProMetric G2	ProMetric G3
Primary Application	Low Light Testing, Source Testing	R&D, Mura Detection
CCD Resolution	1536 x 1024	3072 x 2048
Total Megapixels	1.6	6.3
CCD Type	Cooled, Full-frame	
CCD A/D Dynamic Range	14 bits = 16384 gray scale levels	
High Dynamic Range (multi-exposure)	NA	
Luminance (Minimum)	0.000005 cd/m <sup>2</sup> Limit of Detection 0.0001 cd/m <sup>2</sup> @ SNR = 60 0.0005 cd/m <sup>2</sup> @ SNR = 300	
Luminance (Maximum)	10 <sup>10</sup> cd/m <sup>2</sup> with optional ND filters	
System Accuracy*	Illuminance ± 3% Luminance (Y) ± 3% Color Coordinates (x,y) ± 0.003	
Short-term Repeatability**	Illuminance ± 0.05% Luminance (Y) ± 0.05% Color Coordinates (x,y) ± 0.0001	
Lens Type / Focal Distances Available	Electronically controlled focus and aperture; 20, 50, 100, 200 mm	Electronically controlled focus and aperture; 35, 50, 100, 200 mm
Field of view*** (Full Angle, H x V degrees)	20 mm lens - 38° x 26° 50 mm lens - 15° x 10° 100 mm macro - 7° x 5° 200 mm - 3.5° x 2.3°	35 mm lens - 42° x 28° 50 mm lens - 30° x 20° 100 mm macro - 15° x 10° 200 mm - 7° x 5°
Measurement Time (for 100 cd/m <sup>2</sup> )	2.3 sec - photopic; 8 sec - color	6 sec - photopic; 19 sec - color
Spatial Measurement Capabilities	Luminance, Radiance, Illuminance, Irradiance, Luminous Intensity, Radiant Intensity, CIE Chromaticity Coordinates, L*a*b* Color Scale, Correlated Color Temperature (CCT), Dominant Wavelength	
Units	foot-lambert, cd/m <sup>2</sup> , nit, W/sr/m <sup>2</sup> , foot-candles, lux, lux-s, W/m <sup>2</sup> , W-s/m <sup>2</sup> , candela, W/sr, CIE (x, y) and (u', v'), Kelvin (CCT)	
Communication interface	Ethernet 100/1000, USB 2.0 and 3.0 compatible	
Power	100-240 V, 50-60 Hz, 140 Watts	
LCD Touch Panel	Resolution: 800 x 600; Diagonal: 125 mm	
Dimensions (H x W x D)	238 mm x 181 mm x 230 mm	
Weight	4.9 kg	
Operating temperature	0 - 30° C	
Operating humidity	20 - 70% non-condensing	
Warranty	Two Years	

*Specifications subject to change without notice.*



**High-resolution measurement results for flat panel display mura and pixel defects.** The ProMetric G3 imaging colorimeter is ideally suited for the unique demands of high-definition FPD production testing and characterization.

## System Requirements

- 2.0 GHz or faster processor
- 4GB or greater RAM
- Windows 7 or 8
- Ethernet 100/1000, USB 2.0 and 3.0 compatible

\* Based on illuminant A or user calibration for specific spectra. Based on a virtual detector size of 1% of FOV. Specification is for every point within the field of view of the colorimeter.

\*\* At every point within the field of view of the colorimeter, based on a virtual detector size of 1% of FOV.

\*\*\* Other lenses are also available. Contact Radiant Vision Systems for more information.