

RadOMAcam Radiometric Telescope Camera System



The RadOMAcam is a radiometric optical multichannel analyzer camera for use in conjunction with our GS-1220 and GS-1290 series spectroradiometers and S400 series optical power meters. It provides the optical interface to determine spectroradiometric quantities in units of Radiance and Radiant intensity. Unique features include a back-illuminated Field Stop Aperture that allows the DUT measurement area to be illuminated and serve as an autocollimator alignment tool with calibration validity over a large focus/object distance range.

The RadOMAcam can also be connected to single detectors with or without filters, to measure radiometric and photometric values directly. This may include laser, LED, or lamp-based sources. Values of luminance and color can also be determined via a four-detector tristimulus colorimetric sensor.

Exceptional Sensitivity and Precision

- Measurement of display color and luminance
- Display contrast and contrast function
- 3D display parallax
- Angle versus color changes in displays and materials
- Near Eye Display and associated optical component performance evaluation
- Night Vision Imaging System (NVIS) compatibility measurements of displays including FPDs
- Signal light intensity and color and color uniformity conformance

Key Application Areas

OLED Panel Inspection

Signal Light Characterization

Anti-collision Light Measurement

LED Device Characterization

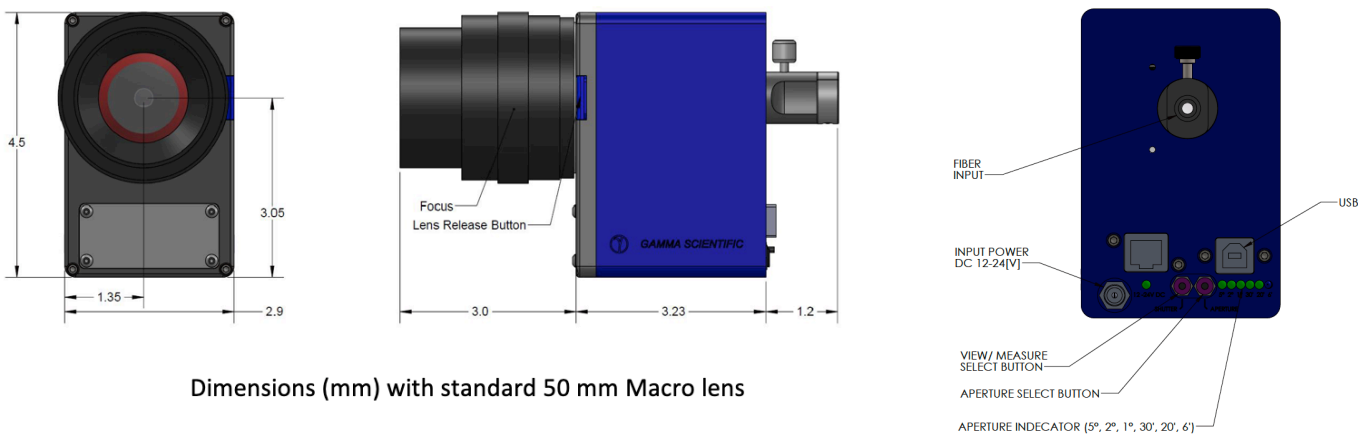
Virtual Image Display Analysis

Near Eye Display Inspection and Characterization including HUD, VR, AR

In addition to our exceptional technical and functional capabilities, Gamma Scientific is ISO/IEC 17025 accredited by NVLAP (NVLAP lab code 200823-0).

General Specifications	
Wavelength Range	320 to 2400 nm (190 to 1100 nm with UV configuration option)
Measurable Spot Size	70 μ m to 28 mm via software selectable field stop apertures and lens combinations
Focal Range	Infinity to 5 diopter object distance for < 100mm FL variable focus lens selection
Computer Interface	<ul style="list-style-type: none"> • CCD Internal Viewing Camera, field stop aperture and back illumination LED control executable • GSDMS suite of display measurement and analysis software • GSDMScam Internal Viewing Camera, aperture and back illumination LED control interface program with image processing of camera image for Michelson contrast and MTF measurements • LightTouch™ and LightTouch NVIS™
Lens Interface	Canon C-mount bayonet type
Operating Temperature	0 to 50° C
Relative Humidity	10 to 85% (non-condensing)
Weight	1.7 kg (RadOMAcam body and standard 50 mm EF compact Macro lens)
Options	
Objective Lens Options	<ul style="list-style-type: none"> • 20mm wide angle lens -- for use with 940 nm system • Canon 50 mm EF compact Macro – for use with Display Measurement Systems • Tamron 180 mm EF Macro – for NVIS systems & other applications requiring small spot size • Canon 50 mm EF compact Macro Lifesize converter – use with 50 mm or 180 mm for very small spot size • 66178 50 mm Fixed Focal Length • 60mm EF Macro • UV Objective lens 300 nm to 900 nm high resolution objective • Custom objective lens configurations available – please consult with factory
Polarization Analyzer	Attaches in front of Objective lens
Time Domain Measurements	Includes image response and image lag time

Specifications are subject to change without notice.



Dimensions (mm) with standard 50 mm Macro lens