

» SR-300N Integrating Sphere

Standard Integrating Sphere

CI Systems offers a cost effective highly uniform integrating sphere for the VIS-SWIR wavelength range.

The system provides uniform radiance for testing of cameras that operate in a wide spectral range. Now offering three standard sizes: 1", 2" and 4" output port diameters.

Using a highly reflective internal coating the system is able to produce uniformity of over 98% at its output port.

A continuous variable output is achieved using an high resolution motorized attenuator. Increased dynamic range can be achieved using optional neutral density filters.

Using a variety of light sources the system can be adapted to provide higher Luminance intensities and a wider dynamic range.



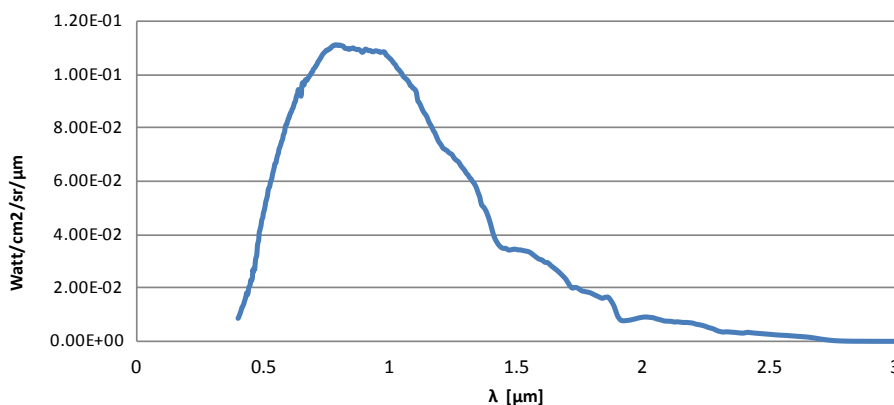
Low Light Integrating Sphere

CI Systems offers a cost effective highly uniform low light integrating sphere for the VIS-SWIR wavelength range.

The system provides uniform low light radiance for testing of night vision cameras that requires extremely low radiance. Now offering two standard sizes: 2" and 4" output port diameters.



» Integrating Sphere Typical Spectrum



Note: Spectrum graph depends on the light source. There may be changes in spectrum when integrating other light sources.

» SR-300N Integrating Sphere

» FEATURES

- ▶ Modular design
- ▶ High uniformity
- ▶ VIS to SWIR radiation
- ▶ Wide dynamic range
- ▶ ft-L or W/sr-cm2 calibration
- ▶ Friendly user interface

» SPECIFICATIONS

MODEL	SR300N - 1 Standard	SR300N - 2 Standard	SR300N - 4 Standard	SR300N -L-2 Low Light	SR300N - L-4 Low Light
Diameter of exit aperture	1" (25.4mm)	2" (50.8mm)	4" (100mm)	2" (50.8mm)	4" (100mm)
Diameter of sphere	4" (100mm)	8" (200mm)	12" (300mm)	8" (200mm)	12" (300mm)
Diameter of top sphere	–	–	–	4" (100 mm)	4" (100 mm)
Light source (default) (2)	halogen	halogen	halogen	halogen	halogen
Color temperature (3)	2856°K	2856°K	2856°K	2856°K	2856°K
Luminance (standard)	1000 ft-L	1000 ft-L	1000 ft-L	1 ft-L	1 ft-L
Luminance (minimum)	0.1 ft-L	0.1 ft-L	0.1 ft-L	1*10 ⁻⁵ ft-L by default; other optional	1*10 ⁻⁵ ft-L by default; other optional
Luminance (maximum)	10,000 ft-L	10,000 ft-L	3000 ft-L	10 ft-L by default; other optional	10 ft-L by default; other optional
Luminance uniformity	> 98%	> 98%	> 98%	> 98%	> 98%
Spectral range (4)	0.44 to 1.9µm	0.44 to 1.9µm	0.44 to 1.9µm	0.44 to 1.9µm	0.44 to 1.9µm
Resolution	15bit	15bit	15bit	15bit	15bit
Input ports	Up to 3	Up to 3	Up to 3	Up to 2	Up to 2
Detector type (default) (5)	Silicon detector	Silicon detector	Silicon detector	Silicon detector	Silicon detector
Controller size & weight	350X233X125mm (5Kg)	350X233X125mm (5Kg)	350X233X125mm (5Kg)	350X233X125mm (5Kg)	350X233X125mm (5Kg)
Sphere weight	2.5Kg	3.5Kg	5.5Kg	9.5Kg	22Kg
Line voltage	110/220 VAC, 50/60Hz	110/220 VAC, 50/60Hz	110/220 VAC, 50/60Hz	110/220 VAC, 50/60Hz	110/220 VAC, 50/60Hz

» OPTIONS

- (1) Option for manual or fully automated motorized illumination control
- (2) Optional light source: LED's
- (3) Other color temperatures are optional
- (4) Option for enhanced spectral range for SWIR up to 2.5 µm
- (5) Optional InGaAs detector
- (6) Optional motorized filter wheel for additional calibrated spectral output, up to 8 filters
- (7) Option for radiometric calibration: Multiple calibrations at spectral bands upon request
- (8) Increased dynamic range by adding ND filters at the sphere's output aperture
- (9) Low cost version: Standalone Integrating sphere without controller



Motorized filter wheel