

# Detector Assemblies

Provide greater configuration flexibility to fit an array of application needs



## Compatible and flexible

Labsphere's detector assemblies are compatible with Labsphere's general purpose integrating spheres to provide greater configuration flexibility. All detectors are contained in a housing that fits on a 0.5 inch diameter integrating sphere port frame or port adaptor. Each detector assembly includes a BNC connector and 10 ft coaxial cable.

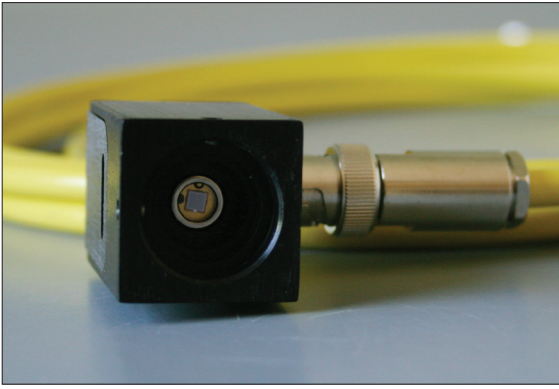
Labsphere offers five different types of non-cooled detector assemblies that are used in a variety of applications.

## Value :

- Easy to mount on a standard 0.5 inch integrating sphere port frame.
- Wide wavelength range selection based on specific application.
- When connected to a radiometer and with appropriate calibration, can monitor the radiant/luminous flux, irradiance/illuminance or luminance/radiance

## Applications:

- Measure UV, visible and infrared radiation; reflectance, transmittance and absorption
- Laser power detection
- Radiometry and photometry
- Low-level radiation
- Luminance and radiance monitoring



### **Silicon Detector Assembly: SDA-050-U-RTA-CX**

The silicon detector assembly is a UV-enhanced photovoltaic detector designed to monitor radiation in an integrating sphere. The unfiltered detector assembly has a broad spectral response from 190 to 1100 nm. Low dark current and high sensitivity and reliability enable it to be used in a wide variety of optical measurements.

### **Photopic Detector Assembly: SDA-050-P-RTA-CX**

The photopic detector assembly is filtered to closely match the CIE photopic observer in the visible region (380 - 780 nm). When integrated with Labsphere's spheres and systems it can provide highly accurate photometric measurements due to low dark current, high linearity and high stability.

### **Germanium Detector Assembly: GDA-050-U-RTA-CX**

The germanium detector assembly monitors radiation in an integrating sphere. The high-quality photodiode is designed for the 800 to 1800 nm wavelength range. The detector has high responsivity, good linearity, fast response times, and excellent long-term stability.

### **Indium Gallium Arsenide Detector Assembly: IDA-050-U-RTA-CX**

The InGaAs detector assembly monitors radiation in an integrating sphere, and is spectrally sensitive from 1000 to 1700 nm. Due to state-of-the-art sensitivity and high responsivity, the detectors are ideal for optical power measurement applications.

### **Extended Range InGaAs Detector Assembly: IDA-EXT-050-U-RTA-CX**

The extended range InGaAs detector assembly is designed for greater flexibility and wider application range. The high-quality photodiode embedded in the detector assembly is designed for the 800 to 2600 nm wavelength range. The detector provides fast rise time, uniformity of response, excellent sensitivity, and long-term reliability for a wide range of applications.