

General Purpose Integrating Spheres

The ultimate choice for configuration flexibility and value



Flexibility

This line is designed to provide greater configuration flexibility than ever before. Choose your sphere by selecting size, ports, and reflectance material. Then design for your application by picking light sources, assemblies, port reducers, and more. Labsphere's wide range of interchangeable accessories offer you an endless number of application options.

This flexibility allows you to create your own uniform source or light measurement system, or modify an existing system in a matter of minutes. A variety of system calibration options enable systems to be customized for application specific tasks.

Easy to use

Labsphere's General Purpose Spheres and Accessories offer a one-stop shop for your application needs. The robust sphere design features sturdy port frames, easy access mounting options, and quick-change accessory options so a multitude of requirements can be met. Labsphere's dedicated calibration lab can provide calibration options to ensure your system is customized to meet specific application requirements.

Proprietary Coatings

The spheres are offered with Spectrafect[®], Spectralon[®] or Infragold[®] coating which combine a highly reflective surface with nearly perfect Lambertian qualities. Durable and stable over time, these coatings ensure optimal integration of light over the lifetime of your sphere.

Applications

- Researching and prototyping
- Building your own systems

Size

Miniature: 1 - 2 inches (cube style)

Standard: 3 - 6 inches

Reflectance Material

Spectralon®

Spectrafect® Coating

Infragold® Coating

Number of Ports

3: two ports on the equator of the sphere at 0° and 90°,
one port at the top

4: an additional port located opposite the 0° port

Baffle

Baffle mounted between the 0° and 90° port

Optional Light Sources

Internal Halogen:

5 - 100 W

External Halogen:

Dichroic: 30 W, 80 W, 120 W

Rhodium: 40 W, 75 W, 100 W

Available Detector Assemblies

Silicon

Germanium

Indium-Gallium-Arsenide

Accessories

Illuminator or Detector Assemblies

Port Reducers

Port Plugs

Filters

and more...

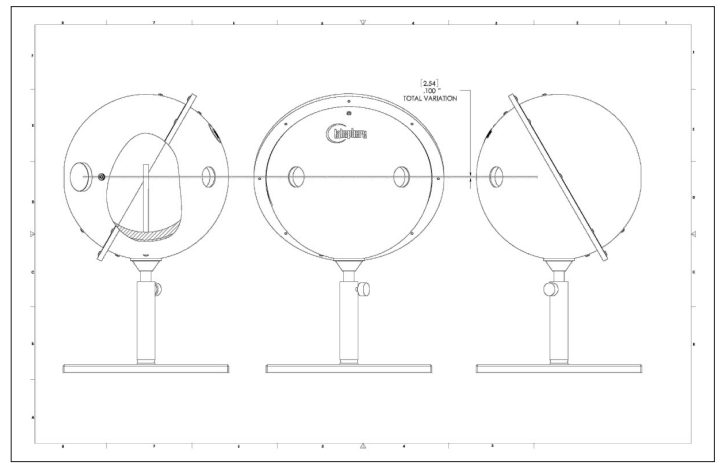
Multiple Calibration Options

Total Spectral Flux Calibration

Radiance Calibration

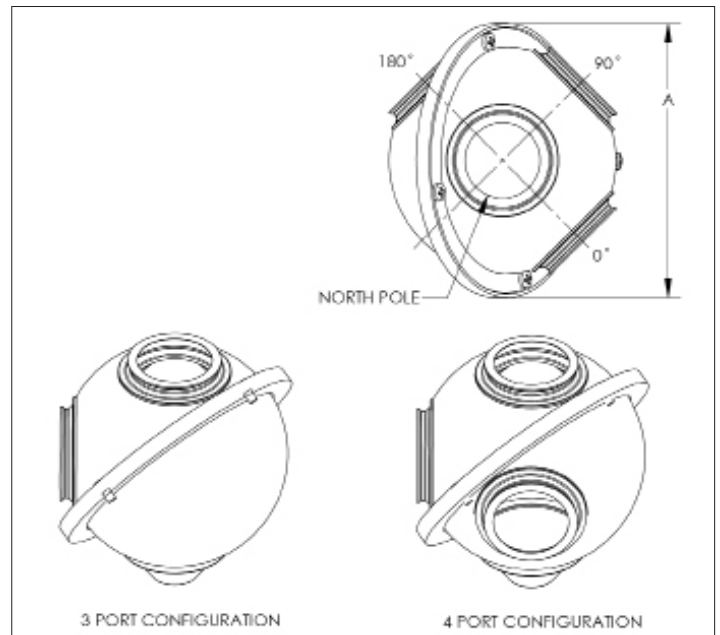
Exit Port Uniformity Mapping

and more...



Most applications require one or more of the following optional accessories:

integrating sphere, illuminator, power supply, detector assemblies, radiometer, photometer, port frame reducer, port reducer, port plug, diffuser assemblies, mounting post, post holders, and base assembly



Other available optional accessories include:

port adaptors, light traps, reflectance and transmittance mounting hardware, filters, and standard

Specifications

Model Number	Part Number	Coating	Port Configuration (in)				
			Interior Diameter (in)	Entrance/Exit	90°	North Pole	180°
3P-GPS-030-SF	AS-02253-030	Spectrafect	3	1.00	1.00	1.00	
3P-GPS-040-SF	AS-02254-040	Spectrafect	4	1.50	1.00	1.00	
3P-GPS-060-SF	AS-02256-060	Spectrafect	6	2.50	1.00	1.00	
4P-GPS-030-SF	AS-02263-030	Spectrafect	3	1.00	1.00	1.00	1.00
4P-GPS-040-SF	AS-02264-040	Spectrafect	4	1.50	1.00	1.00	1.00
4P-GPS-060-SF	AS-02266-060	Spectrafect	6	2.50	1.00	1.00	1.00
3P-GPS-010-SL	AS-02281-010	Spectralon	1	0.25	0.25	0.25	
3P-GPS-020-SL	AS-02282-020	Spectralon	2	1.00	0.50	0.50	
3P-GPS-033-SL	AS-02284-033	Spectralon	3.3	1.50	1.00	1.00	
3P-GPS-053-SL	AS-02286-053	Spectralon	5.3	2.50	1.00	1.00	
4P-GPS-010-SL	AS-02291-010	Spectralon	1	0.25	0.25	0.25	0.25
4P-GPS-020-SL	AS-02292-020	Spectralon	2	1.00	0.50	0.50	0.50
4P-GPS-033-SL	AS-02294-033	Spectralon	3.3	1.50	1.00	1.00	1.00
4P-GPS-053-SL	AS-02296-053	Spectralon	5.3	2.50	1.00	1.00	1.00
3P-GPS-010-IG	AS-02301-010	Infragold	1	0.25	0.25	0.25	
3P-GPS-020-IG	AS-02302-020	Infragold	2	1.00	0.50	0.50	
3P-GPS-030-IG	AS-02303-030	Infragold	3	1.00	1.00	1.00	
3P-GPS-040-IG	AS-02304-040	Infragold	4	1.50	1.00	1.00	
3P-GPS-060-IG	AS-02306-060	Infragold	6	2.50	1.00	1.00	
4P-GPS-010-IG	AS-02311-010	Infragold	1	0.25	0.25	0.25	0.25
4P-GPS-020-IG	AS-02312-020	Infragold	2	1.00	0.50	0.50	0.50
4P-GPS-030-IG	AS-02313-030	Infragold	3	1.00	1.00	1.00	1.00
4P-GPS-040-IG	AS-02314-040	Infragold	4	1.50	1.00	1.00	1.00
4P-GPS-060-IG	AS-02316-060	Infragold	6	2.50	1.00	1.00	1.00