

# General Purpose Integrating Spheres and Kits

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

## Sizes

- Miniature: 1 - 2 inches (cube style)
- Standard: 3 - 6 inches

## Reflectance Materials

- 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

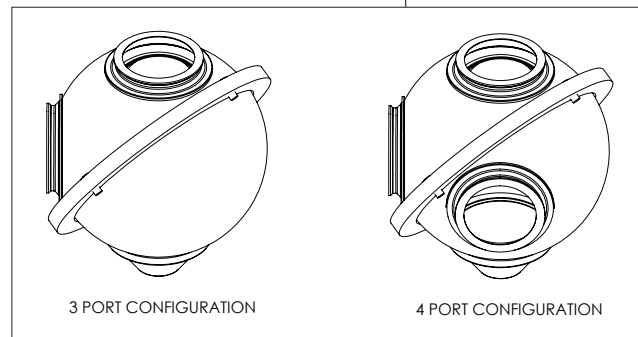
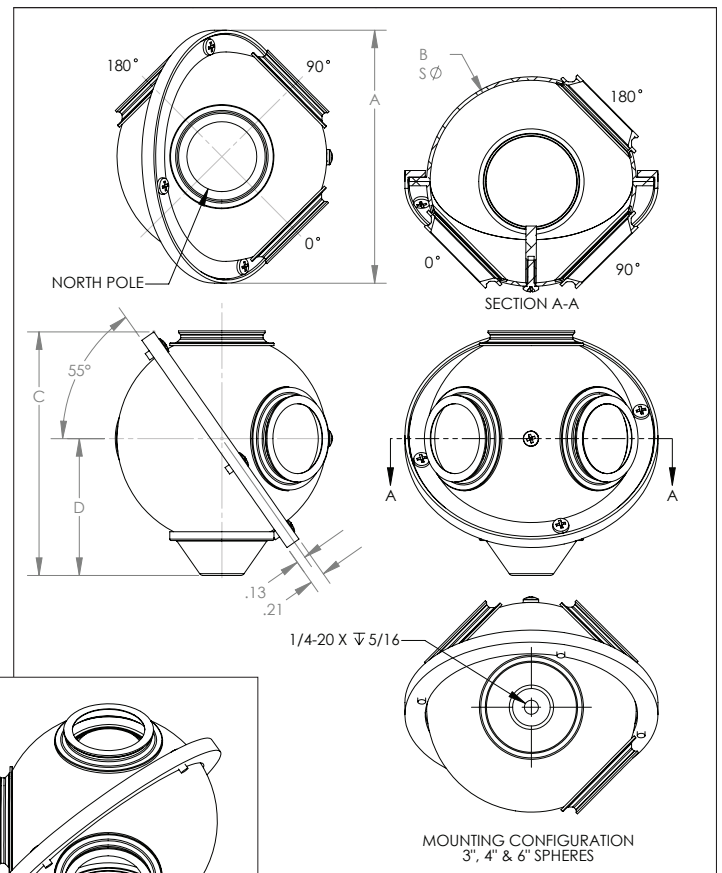
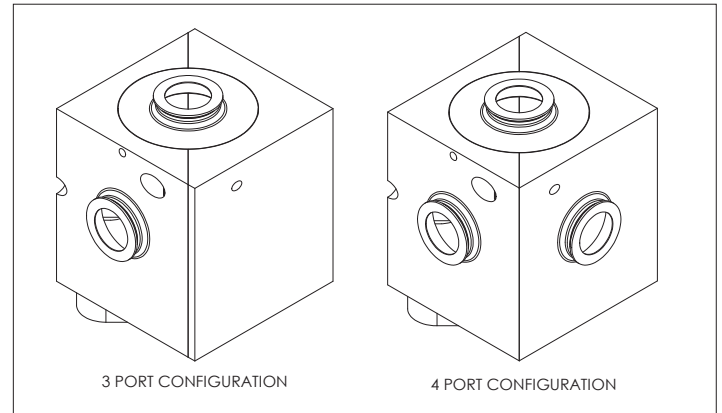
- Illuminator or Detector assemblies
- Port reducers
- Port plugs
- Filters
- and more...

## Multiple Calibration Options

- Total Spectral Flux Calibration
- Radiance Calibration
- Exit Port Uniformity Mapping
- and more...

## Most applications require one or more of the following components:

- Integrating sphere
- Illuminator
- Power supply
- Detector assemblies
- Radiometer
- Photometer
- Port frame reducer
- Port reducer, Port adaptors, Port plug
- Diffuser assemblies
- Mounting post
- Post holders
- Base assemblies
- Light traps
- Filters



# Specifications and Ordering Information

Model Number	Order 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



# General Purpose Sphere Kits

Labsphere General Purpose Starter Kits are conveniently packaged with our most common port accessories, adaptors, and integrating sphere mounting components to help you get started. Check out our webstore to find a large assortment of port accessories, detectors and light sources.



## Ordering Information

Model Number	Order Number	Description
3P-GPS-030-SF-KIT	AS-02253-031	3P-GPS-030-SF, PP-050-SF, 3 PP-100-SF, PFR-FM/M-100-050-SF, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
3P-GPS-040-SF-KIT	AS-02254-041	3P-GPS-040-SF, PP-050-SF, 2 PP-100-SF, PP-150-SF, PFR-FM/M-100-050-SF, PFR-FM/M-150-100-SF, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
3P-GPS-060-SF-KIT	AS-02256-061	3P-GPS-060-SF, PP-050-SF, 2 PP-100-SF, PFR-FM/M-100-050-SF, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
4P-GPS-030-SF-KIT	AS-02263-031	4P-GPS-030-SF, PP-050-SF, PP-100-SF, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
4P-GPS-040-SF-KIT	AS-02264-041	4P-GPS-040-SF, PP-050-SF, 3 PP-100-SF, PP-150-SF, PFR-FM/M-100-050-SF, PFR-FM/M-150-100-SF, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
4P-GPS-060-SF-KIT	AS-02266-061	4P-GPS-060-SF, PP-050-SF, 3 PP-100-SF, PP-150-SF, post 1/4-20 4 in length, post holder 4 in, base 6 x 6
3P-GPS-010-SL-KIT	AS-02281-011	3P-GPS-010-SL, 3 PP-025-SL, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
3P-GPS-020-SL-KIT	AS-02282-021	3P-GPS-020-SL, PP-050-SL, 2 PP-100-SL, PFR-FM/M-100-050-SF, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
3P-GPS-033-SL-KIT	AS-02284-034	3P-GPS-033-SL, 2 PP-100-SL, PP-150-SL, PFR-FM/M-150-100-SF, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
3P-GPS-053-SL-KIT	AS-02286-054	3P-GPS-053-SL, 2 PP-100-SL, PP-250-SL, post 1/4-20 4 in length, post holder 4 in, base 6 x 6
4P-GPS-010-SL-KIT	AS-02291-011	4P-GPS-010-SL, 3 PP-025-SL, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
4P-GPS-020-SL-KIT	AS-02292-021	4P-GPS-020-SL, 1 PP-100-SL, 3 PP-050-SL, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
4P-GPS-033-SL-KIT	AS-02294-034	4P-GPS-033-SL, 2 PP-100-SL, PP-150-SL, PFR-FM/M-150-100-SF, post 1/4-20 4-in length, post holder 4 in, base 4 x 4
4P-GPS-053-SL-KIT	AS-02296-054	4P-GPS-053-SL, 2 PP-100-SL, PP-250-SL, post 1/4-20 4 in length, post holder 4 in, base 6 x 6
3P-GPS-010-IG-KIT	AS-02301-011	3P-GPS-010-IG, 3 PP-025-IG, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
3P-GPS-020-IG-KIT	AS-02302-021	3P-GPS-020-IG, 2 PP-050-IG, PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
3P-GPS-030-IG-KIT	AS-02303-031	3P-GPS-030-IG, 3 PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
3P-GPS-040-IG-KIT	AS-02304-041	3P-GPS-040-IG, PP-150-IG, 2 PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
3P-GPS-060-IG-KIT	AS-02306-061	3P-GPS-060-IG, PP-250-IG, 2 PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 6 x 6
4P-GPS-010-IG-KIT	AS-02311-011	4P-GPS-010-IG, 4 PP-025-IG, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
4P-GPS-020-IG-KIT	AS-02312-021	4P-GPS-020-IG, 3 PP-050-IG, PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 2 x 2
4P-GPS-030-IG-KIT	AS-02313-031	4P-GPS-030-IG, 4 PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
4P-GPS-040-IG-KIT	AS-02314-041	4P-GPS-040-IG, PP-150-IG, 3 PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 4 x 4
4P-GPS-060-IG-KIT	AS-02316-061	4P-GPS-060-IG, PP-250-IG, 3 PP-100-IG, post 1/4-20 4 in length, post holder 4 in, base 6 x 6



Advancing the Technology of Light: Measure. Create. Reflect.

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