ACCESSORIES FOR GENERAL PURPOSE INTEGRATING SPHERES

A variety of interchangeable accessories to enable application specific customization



ACCESSORIES SHOWN WITH GENERAL PURPOSE SPHERES

FEATURES:

Sturdy Construction

Adapts Measurement Parameters

Multiple Size, Coating, and Application Options

Enable spheres and systems to be customized for individual applications

ADAPTABLE

Integrating Sphere Accessories give users the ability to customize integrating spheres and systems to their specific measurement requirements. The interchangeable accessories are easily attached to port frames and matched to the integrating sphere wall reflectance value to ensure measurements accuracy.

Accessories allow you to create a uniform source or light measurement application with Labsphere's General Purpose Integrating Spheres, or modify Labsphere's Light Measurement Systems to change or enhance functionality.

EASY-TO-USE

Integrating Sphere Accessories offer one-stop shop for all of your application needs. The sturdy port frame design on Labsphere's integrating spheres allow users to quickly mount accessories to the integrating sphere with the quick twist of a set screw.

Labsphere's dedicated calibration lab provides a variety of NIST-traceable calibration options for systems that include accessories for specific application requirements.



PORT ACCESSORIES

PROVEN RELIABILITY

All accessories are created in an ISO-9001:2000 registered environment. Labsphere's proven Spectralon®, Spectraflect®, Infragold®, highly reflective diffuse material and coatings are used to ensure system precision is maintained.

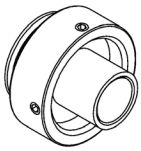
Our qualified engineering and support staff is on hand to help you select the accessories that are right for your application.

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Accessory Specifications

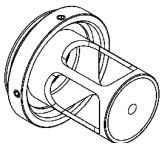
Integrating Sphere Accessories come in a variety of material and coatings options and sizes to best meet individual application requirements.

COSINE DIFFUSER ASSEMBLIES



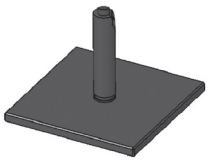
The Cosine Diffuser Assemblies obtain a uniform view that resembles a near cosine collection, that consists of an opal glass diffuser in a metal holder and mounts onto the port frame. Light transmitted by the diffuser is scattered in a near-Lambertian distribution; i.e., the angular distribution of transmitted light approximates a cosine distribution.

CONE BAFFLE ASSEMBLY



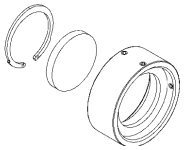
The Cone Baffle Assembly diffuses light entering into the integrating sphere from an external source or shields the detector from collecting direct radiation from a light source. The baffle mounts onto a 1-inch diameter port frame, and is designed to be positioned at the port opposite the integrating sphere device (e.g. light source or detector) to prevent the direct exchange of radiation between the two attachments. The cone baffle is tapped for affixing larger baffles.

MOUNTING HARDWARE



Labsphere's integrating spheres are equipped with a boss mount, compatible with a standard-size threaded mounting post or fastener. Mounting posts and base assemblies are available in various lengths, with either English (1/4-20) or Metric (M6) threads which require a 1/4-20 to M^ adaptor. Posts slide into the sleeve of a post holder, which provides adjustable sphere height. Post holders are designed to mount integrating spheres onto an optical bench, while bases allow integrating spheres to be free standing.

PORT ADAPTORS



Port Adaptors mount onto the port frame to provide a mechanical interface between the sphere and another system component, either directly, via gender change adaptors. Please refer to the Port Adaptor selection chart to find the right adaptor for your application.

PORT PLUGS



Port Plugs mount onto a port frame to cap unused ports to eliminate light from escaping. Port plugs are matched to the reflectance of the sphere wall (-SF, -SL, or -IG), or to the open port itself (-FB) to maintain the system's calibration. Please refer to the Port Plug selection chart to find the right port plug for your application.

PORT FRAME REDUCERS



Port Frame Reducers mount onto the port frame, to change the port frame to a smaller diameter. This allows accessories designed for smaller port sizes to be used with larger port frames. Please refer to the Port Frame Reducers selection chart to find the right frame reducer for your application.

PORT REDUCERS



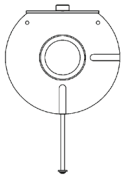
A Port Reducer mounts onto a port frame to aperture down the diameter of the port. Please refer to the Port Reducers selection chart to find the right reducer for your application.

FIBER ADAPTORS



A Fiber Adaptor couples light from an optical fiber to an integrating sphere, and then sends it to a fiber-based instrument, such as a spectrometer. ST, SMA, FC/PC, and LC versions are available.

FILTERS AND FILTER HOLDERS



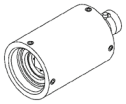
Filters can be used for a variety of applications. They can modify the spectrum of light entering into the integrating sphere, when mounted in front of a light source. They can enable light to be measured at a specific wavelength band, when mounted in front of a detector port. And they can attenuate the signal level to avoid detector saturation, when mounted in front of a detector port. 0.5, 1.0 and 2.0 inch versions are available.

SAMPLE HOLDERS



Sample Holders are designed to hold reflectance and transmittance samples. Sample Holders mount onto a Port Frame or Port Frame Reducer. The sample holder may be disassembled such that only the mounting plate remains to accommodate large samples. Sample Holders are available in Spectraflect® or Infragold® coatings.

DETECTOR ASSEMBLIES



Detector Assemblies are used to measure or monitor light levels within an integrating sphere. All detectors can be mounted to a 0.5-inch diameter port. Si, GE and InGaAs versions are available.