

# OL IS-1800 / IS-3900 / IS-7600

## Large Integrating Spheres



This series of Large Integrating Spheres is designed for total luminous flux and/or total spectral flux measurement applications. The OL IS-1800, OL IS-3900, and OL IS-7600 have diameters of 18, 39, and 76 inches respectively and are coated with the rugged, washable, Optolon 2 Integrating Sphere Spray Coating (see OL Information Sheet IS17).

For total luminous flux measurement applications, the OL IS-1800, OL IS-3900 and OL IS-7600 Integrating Spheres can be obtained as part of a complete measurement system: namely, the OL IS-1800-TLF, OL IS-3900-TLF and OL IS-7600-TLF Total Luminous Flux Measurement Systems (see Bulletin 141).

For total spectral flux measurement applications, the OL IS-1800, OL IS-3900 and OL IS-7600 can be interfaced to the OL 750, OL 754, and OL 756 Spectroradiometer Systems (please consult factory for recommended system configurations).

The OL IS-1800, OL IS-3900 and OL IS-7600 consist of two hemispheres mounted in a rugged frame equipped with locking casters. The hemispheres separate for ease of opening for installing or interchanging lamps. The sphere design makes provision for using an optional auxiliary lamp. Two standard baffles are included: one located between the lamp to be measured and the exit port and one located in front of the optional auxiliary lamp. These baffles, which are also coated with Optolon 2, prevent non-integrated incident light from directly reaching the detector port.

Also located inside the sphere assembly is a lamp holder mounting plate. The lamp holder plate facilitates the mounting of various types of lamp holders and sockets. The design of each lamp holder positions the lamp near the relative center of the sphere assembly and includes an additional coated baffle as required by the size of the lamp to be measured.

A number of commonly used lamp holders are available for use with the Large Integrating Spheres. Please consult the factory for lamp holders not listed below:

### Lamp Holder

OL 6707  
OL 6633  
OL 6688  
OL 6659  
OL 6658  
OL 6661  
OL 6662  
OL 6668

### Lamp Type

45-W Total Luminous Flux Standard  
200-W Total Luminous Flux Standard  
500-W Total Luminous Flux Standard  
E-26 Incandescent Medium Screw Base  
E39 Mogul Screw Base (base up)  
R-5 Double-Ended Halogen  
Twin Tube Fluorescent  
Adjustable Length Fluorescent



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