

OL IS-1800/ IS-3900

Large Integrating Spheres

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

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

For total spectral flux measurement applications, the IS-1800 and IS-3900 can be interfaced to the OL Series 754 and OL Series 750 Spectroradiometer Systems. Consult factory for recommended system configurations.

The IS-1800 and IS-3900 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	LAMP TYPE
OL 6707	45-W Total Luminous Flux Standard
OL 6633	200-W Total Luminous Flux Standard
OL 6688	500-W Total Luminous Flux Standard
OL 6659	E-26 Incandescent Medium Screw Base
OL 6658	E39 Mogul Screw Base (<i>Base Up</i>)
OL 6661	R-5 Double-Ended Halogen
OL 6662	Twin Tube Fluorescent
OL 6668	Adjustable Length Fluorescent