# **ISP 150L**

150 mm Integrating Sphere for measuring radiant power and luminous flux



The ISP 150L integrating sphere has been designed for production applications with tight space requirements. The stand alone lab version is a cost effective solution for standard and high power LEDs. With the proven sphere design of Instrument Systems and a diameter of 150 mm it fulfils the requirements for accurate luminous flux measurements. All spectrometers from Instrument Systems can be interfaced with the ISP 150L by means of fiberoptic cable. Self-absorption effects of the samples can be compensated by the optional 10 W auxiliary light source.

For LED production applications like LED sorting or wafer probing, Instrument Systems offers users a protective dome or window which will be mounted on the ISP 150L 50 mm opening port. The 36 mm diameter quartz dome or the 35 mm quartz window protect the BaSO4 coating against contamination and environmental influences. Optional adapters for Instrument Systems standard LED test sockets are available for testing of single LEDs in the lab and for calibration purposes.



#### Product highlights

- Proven design for superior uniformity
- Complete system for laboratory applications
- OEM version for production applications
- Optional protective quartz dome or window for measurement port
- Optional auxiliary lamp for self absorption correction
- New formula BaSO4 coating for reduced aging and low fluorescence

### **Technical Specifications**

Specification	ISP 150L-130
Diameter, internal	150 mm
Dimensions D x h	Ø 181 x 148 mm
Measurement opening	Ø 50 mm
Connection	Connected via fiber bundle
Optical coating inside	Bariumsulfat, (BaSO4)
Wavelength range	240 mm to 2600 mm
Weight	ca. 0.6 kg

## **Ordering Information**

Order number	Description	
ISP150L Integrating Sphere		
ISP150L-130	Integrating sphere with 150 mm internal diameter; measurement port 50 mm diam., connector for fiber bundle on the side, BaSO4 coating, spectral range 240 to 2600 nm; version for mounting on a mechanical sorter or prober	
ISP150L-131	Integrating sphere with 150 mm internal diameter; measurement port 50 mm diam., connector for fiber bundle on the side, BaSO4 coating, spectral range 240 to 2600 nm; halogen auxiliary lamp 6 V, 10 W, spectral range 360 to 2200 nm; version for mounting on a mechanical sorter or prober	
ISP150L-250	Integrating sphere with 150 mm internal diameter, complete for laboratory applications; includes ISP150L, adapter plate for LED test sockets with 25 mm diam., OFG-414, PLG-410; spectral range 380 to 1600 nm	
ISP150L-251	Integrating sphere with 150 mm internal diameter, complete for laboratory applications; includes ISP150L, adapter plate for LED test sockets with 25 mm diam., OFG-424, PLG-420; spectral range 240 to 1350 nm	
Options		
ISP150L-140	Protective window for measurement port of ISP150L; quartz window, 35 mm diam.	
ISP150L-143	Protective dome for measurement port of ISP150L; quartz dome, 36 mm diam.	
ISP150L-190	Halogen auxiliary lamp with mount; 6 V, 10 W; spectral range 360 to 2200 nm; standard version with straight connector plug; option for ISP150L-25X	
ISP150L-211	Adapter plate for standard 25mm LED test sockets	
ISP150L-215	Adapter plate for Ø 25 mm test sockets with ISPO150L-143 protective dome	
Accessories		
PS-100	Stabilized power supply for tungsten halogen lamp 0-16 V, 0-5 A	



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