

# Integrating Sphere for Reflection

SIM-3003 Series

Compared to an integrating sphere for radiation, an integrating sphere for reflection has an additional oblique 8° light entrance port at the bottom for connecting to a light source. This allows light from the standard source to directly illuminate the sample port at the top of the integrating sphere. After the standard light arrive to the sample surface, it reflects back into the integrating sphere, where the reflected light is measured and analyzed through other measurement ports.

The reflection integrating sphere, when used in combination with a spectrometer, optical fibers, a light source, and various optical measurement devices, can form a complete system for measuring the surface reflectance of different samples. This includes both flat irregular samples and curved irregular samples.



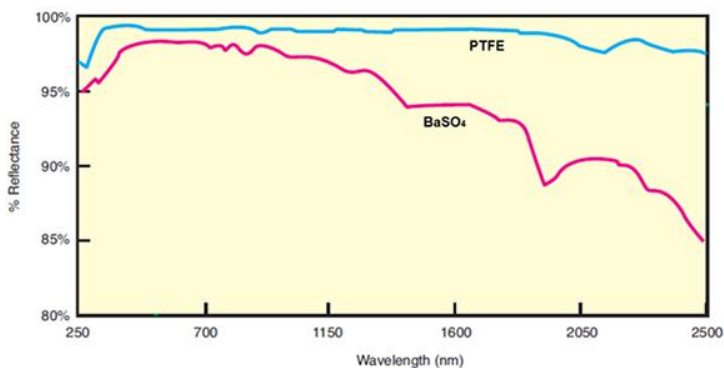
## Features

- Compact design with SMA905 fiber connectors
- 8° inclined light inlet ensures vertical light path
- Vertical output port, convenient to place samples

## Applications

- Illumination optics and laser technology
- Fiber optics and material analysis
- Biomedical and biochemical technologies
- Measurement of material reflectance properties

## Reflectivity of integrating sphere coating



The reflectivity for the two coating materials PTFE/ BaSO<sub>4</sub>

## Specifications

Model	SIM-3003-03001	SIM-3003-02501	SIM-3003-03801	SIM-3003-05001
Sphere Diameter	30mm	1 inch	1.5 inch	2 inch
Outline Size	Φ49 ×42mm	Φ44×37.5mm	Φ57×50.5mm	Φ70×63mm
Entrance Port	Bottom, with fiber adapter			
Sample Port	Top, with customization size			
Detection Port	Side, with fiber adapter			
Coating Material	PTFE			
Wavelength Range	250~2500nm			

## Optional

BIM-6316 Integrating Sphere for Reflection Stage

\*customization according to the size of the integrating sphere

