

# OP-SPHR

## Integrating Sphere

### Overview

OptoTest's **OP-SPHR Integrating Sphere** is designed as a cost-effective solution for optical testing of fibers terminated with high-density connectors such as MTP®/MPO or bare fiber. The Integrating Sphere works by reflecting and evenly distributing the light over the entire surface of the internal cavity, making Insertion Loss (IL) measurements stable and repeatable with low polarization dependence.

The screw-on design is ideal for implementing into new or existing Test Systems to accommodate up to 72 fibers and can be used with all OptoTest 1mm and 3mm detector designs.



Figure 1: Model OP-SPHR Detector-Mounted Integrating Sphere.

### Features

- Uniform distribution of light on the detector results in superior accuracy
- Operating range (+20dBm to -50dBm)
- Interchangeable between detectors without affecting accuracy or repeatability
- Interfaces to existing 1mm and 3mm detectors, front mount or remote head
- Adapters for all common connector types including MTP®, 1.25mm, and 2.5mm
  - Magnetic connections on the adapters make them easily exchangeable
  - Built-in screw hole allows for optional added rigidity
  - Bare fiber adapters available for simplex or ribbon fiber
- No calibration of the sphere needed

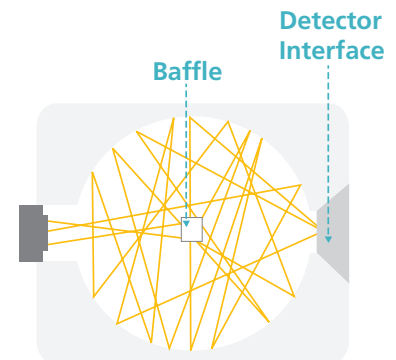


Figure 2: The integrating sphere works by scattering the incoming light uniformly around the internal cavity.

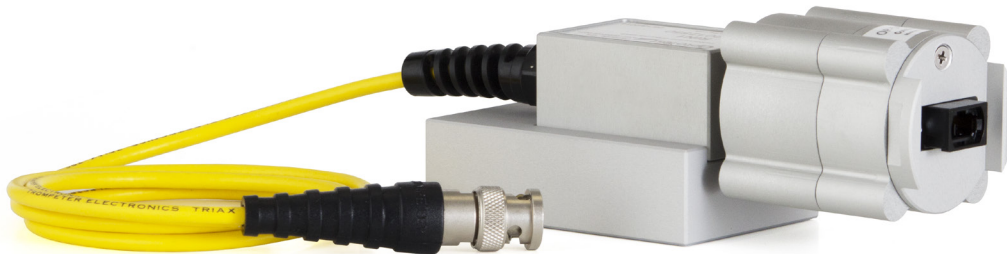
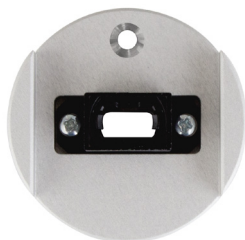


Figure 3: Model OP-SPHR attached to a remote head detector with a baseplate and an AD-SPHR-MTP adapter.



AD-SPHR-MTP



AD-SPHR-125



AD-SPHR-25



AD-SPHR-BFA

Additional adapters for the OP-SPHR are available. For more information, please contact OptoTest or the distributor in your area.