

Reflectance and Transmittance Measurement Systems

Achieve accurate and repeatable optical measurements

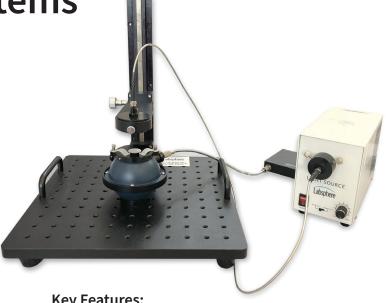
Welcome to the forefront of precise spectral reflectance and transmittance measurements with flexible innovative systems designed for practical analysis. Our systems combine reliability with ease of use to empower researchers, engineers, and professionals across industries.

The systems are engineered for versatility and reliability, making them suitable for a wide range of applications and environments. Whether you're in research, development, or quality control, our solutions empower you to achieve accurate and repeatable optical measurements.

Discover the perfect combination of components to suit your measurement requirements. Each system is carefully curated to deliver performance and usability, backed by Labsphere's commitment to excellence in optical instrumentation.

Applications:

- Materials Science: Characterize coatings, films, and surfaces for optical properties.
- Biotechnology: Analyze bio-materials, bio-films, and cellular structures with precision.
- Environmental Monitoring: Assess light absorption and scattering in environmental samples.
- Industrial Quality Control: Ensure consistent optical quality in manufacturing processes.



Key Features:

- Fiber Light Source:
 - Our fiber light source delivers stable broadband and near-collimated illumination, ensuring consistent results across samples and references.
- Spectrometer:
 - The included spectrometer provides high-resolution spectral analysis, allowing for VIS-NIR characterization of test samples.
- Integrating Spheres: Choose from our range of reflectance and transmittance integrating spheres tailored to your specific measurement needs:
 - Single Beam Reflectance Integrating Sphere: Ideal for measuring reflectance properties with a single beam setup, offering simplicity and accuracy in reflective analysis.
 - Dual Beam Reflectance Measurement Integrating **Sphere:** Enables substitution error correction between test sample and reference standard spectral reflectance offering measurements of a broad range of spectral reflectance with a single reference.
 - Dual Beam Reflectance and Transmittance Measurement Integrating Sphere: Designed for comprehensive analysis, this sphere allows for measurement of both reflectance and transmittance from a single test bench, providing a complete understanding of light interaction with test samples.

Models and Descriptions

RSA-FO-150-800-S 150 mm Single Beam Reflectance Sphere Accessory, with FBS-150-S 150W QTH Single Fiber

Source, CDS-800 Spectrometer, and RTS-010 Reflectance Transmittance Software.

Reflectance Standards sold Separately

RSA-FO-50-DB-800 50 mm Dual Beam Reflectance Accessory, CDS-800 Spectrometer, SRS-99-010 Diffuse Reflectance

Standard Kit, and RTS-010 Reflectance Transmittance Software

50 mm Dual Beam Reflectance and Transmittance Accessory, with FBS-150-S 150W QTH Single RSA-FO-TW-76-800-S

Fiber Source, CDS-800 Spectrometer, SRS-99-010 Diffuse Reflectance Standard,

and RTS-010 Reflectance Transmittance Software

Ordering Information and Specifications

Model Number: RSA-FO-150-800-S RSA-REF-50-DB-800 RSA-FO-TW-76-800-S **Order Number:** AS-03248-000 AS-03249-000 AS-03250-000 RSA-REF-50-DB **Integrating Sphere:** RSA-FO-150 RSA-FO-TW-76 150 mm Single Beam 76 mm Dual Beam

Reflectance Sphere

Accessory Light Source: FOL-150-S Integrated Spectrometer: CDS-800 CDS-800 Reference Standard: Optional* SRS-99-010 Software: RTS-010

Spectral Range: ~ 360 to 1000 nm ~ 360 to 1000 nm

Reflectance Geometries: 8/H, Specular included

or excluded

Transmittance Geometry: n/a

Light Source:

Sample Collection: Sphere Wall Reference Collection: n/a

Bulb Life: 200 hrs. Bulb CCT: 3200K

50 mm Dual Beam Reflectance Accessory

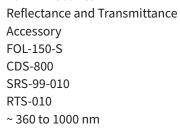
RTS-010

D/8

n/a

Sample Sphere Wall 900 hrs

3100K



8/H, Specular included or excluded 0/H Normal Incidence Fiber with SMA Sample Sphere Wall

200 hrs 3200K



RSA-FO-150 Fiber Optic Single Beam Reflectance Spectroscopy Accessory



RSA-REF-50-DB **Dual Beam** Reflectance Spectroscopy Accessory



RSA-FO-TW-76 Reflectance/Transmittance **Sphere Tower**

^{*} Recommended Reference Standard Kits: AS-01163-060 RSS-040-010 AS-01163-160 RSS-080-010

