

Fiber-Coupled Light Source

Ideal for spectral irradiation in reflectance and transmittance setups

The Labsphere Fiber-Coupled Light Source is engineered for spectral irradiation in reflectance and transmittance setups, catering to general-purpose laboratory applications and quality inspection processes. This accessory seamlessly integrates into Labsphere's reflectance and transmittance measurement integrating spheres, providing a reliable and versatile solution for your optical measurement needs.



Key Features:

• Broadband Spectral Irradiation:

 The internal light source employs a quartz halogen technology, ensuring broad-spectrum coverage for accurate reflectance and transmittance measurements.

• Fiber Optic Connectivity:

Each light source includes a removable,
 36" long, Ø6.4 mm effective core fiber bundle,
 facilitating efficient light delivery to the sample under investigation.

• Output Port Compatibility:

 Featuring an internally SM1-threaded (1.035"-40) output port, this light source seamlessly integrates into reflectance and transmittance measurement integrating spheres, promoting flexibility in experimental setups.

• Integrated Hot Mirror:

- The Labsphere Fiber-Coupled Light Source is equipped with a pre-installed quartz halogen bulb that incorporates a built-in hot mirror. This hot mirror effectively blocks the majority of infrared (IR) light, enhancing the precision of your measurements.

• Wavelength Range:

- The quartz halogen bulb provides a typical wavelength range of 400 - 1600 nm, ensuring comprehensive coverage across the visible and near-infrared spectra.

• Illumination Control:

- An analog dial on the front of the source assembly allows users to smoothly adjust illumination levels from zero to maximum output. This feature enables optimization for various experimental conditions when used in conjunction with Labsphere reflectance and transmittance measurement accessories.

Features:

- Manual and remote on/off
- Variable power output
- Easy lamp replacement

Applications:

- Ideal for general-purpose laboratory use
- Well-suited for quality inspection processes
- Facilitates accurate reflectance and transmittance measurements

Ordering Information and Specifications

Model Number: FOL-150-S Order Number: LAS-00374-000

Color Temperature of Included Bulb: 3200K at Maximum Bulb Intensity
Operating Wavelength Range: 400 - 1600 nm (IR cutoff filter at 800 nm)

Color Rendering Index: (CRI) 90%
Intensity Adjustment Range: 0 to 100%

Time to Full Brightness: 4 s Typical, 7 s MaximumOutput Power Stability: $\pm 0.5\%$ over 8 Hours

Lamp Rated Life: 200 Hours

Included Bulb: EKE 21V 150 W, 3200 K
Input Voltage: 100 - 120 VAC, 50/60 Hz
200 - 240 VAC, 50/60 Hz

Operating Temperature: $-10 \sim 450 \,^{\circ}\text{C}$

Humidity Range: 0 - 80%, Non-Condensing

Dimensions: 215 mm (8.5 in) L x 92.5 mm (3.64 in) W x 127.5 mm (5 in) H

Weight: 2.0 kg (4.45 lbs)

Fiber Bundle Specifications

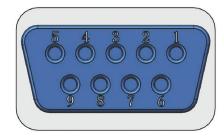
Fiber Bundle Length: 91 cm (36 in)

Fiber Bundle NA: 0.57

Fiber Bundle Effective Core Diameter: Ø6.4 mm (Ø0.25 in)

 $\begin{tabular}{lll} Fiber Core Diameter: & 50 \ \mu m \\ Fiber Cladding Diameter: & 52.5 \ \mu m \\ Bundle Minimum Bend Radius: & 100 \ mm \\ \end{tabular}$

Interface Specifications



NO. DESIGNATION

- 1 Switch-Signal GND I
- 2 Switch-Signal>DC1 .5V-12V off
- 3 NC
- 4 NC
- 5 NC
- External dimming signal DC 0-5VExternal dimming signal GND
- 8 NC
- 9 NC

Note: Product specifications are subject to change without prior notice as part of our commitment to continuous improvement.

