

# Integrating Sphere with internal halogen light source

## AvaSphere-50-LS-HAL-12V



Providing up to 160 times more light on your sample for a reflection measurement relative to our standard reflectance integrating sphere, the AvaSphere-50-LS-HAL-12V is a valuable instrument for reflection applications. It is a combination of an integrating sphere and a halogen light source. The sphere provides diffused halogen light on your sample without the losses associated with fiber-optic coupling. It has a direct collimated SMA-port for collection of the reflection signal with any of our AvaSpec spectrometers.

It's mostly useful for dark or low reflecting materials and NIR spectral measurements

where signal strength can be limited. It is also very useful for measuring gem stones. In the application section of this catalog a complete gemology setup can be found.

The AvaSphere-50-LS-HAL-12V has an internal diameter of 50 mm, a sample port of 10 mm and an SMA terminated reference port. The 5W halogen lamp is stabilized and cooled with forced airflow. A 12V power supply is included.

The switch line makes it possible to remotely switch the lightsource on/off with a TTL signal.

### Technical Data

<b>Wavelength range</b>	360-2500 nm
<b>Internal diameter</b>	50 mm
<b>Sample port diameter</b>	10 mm
<b>Color temperature</b>	2850 K
<b>Stability/Drift</b>	< 0.1% / h
<b>Bulb life</b>	4.000 hrs
<b>Power requirement</b>	12VDC, 1A
<b>External Dimensions</b>	70 mm diameter, 82,5 mm height

### Ordering Information

<b>AvaSphere-50-LS-HAL</b>	<ul style="list-style-type: none"> <li>Integrating sphere 50 mm for reflection (360-2500 nm), including 5W halogen lightsource, sample port 10 mm diam., 2 SMA ports (reflection and reference) and 12V power supply.</li> </ul>
<b>AvaLight-HAL-B-5W</b>	<ul style="list-style-type: none"> <li>Replacement 5W halogen bulb for AvaSphere-50-LS-HAL-12V</li> </ul>
<b>IC-DB26-AvaSphere-0,5</b>	<ul style="list-style-type: none"> <li>Interface cable to control switchline with AvaSpec</li> </ul>
<b>AvaSphere-50-HOLD</b>	<ul style="list-style-type: none"> <li>WS-2-GEM tile holder for AvaSphere-50-LS-HAL for gemology applications</li> </ul>

Pre-configured spectrometers can be shipped within 24 hours