

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

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

Ordering Information

AvaSphere-50-LS-HAL-12V	<ul style="list-style-type: none"> 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.
AvaLight-HAL-B-5W	<ul style="list-style-type: none"> Replacement 5W halogen bulb for AvaSphere-50-LS-HAL-12V
IC-DB26-AvaSphere-0,5	<ul style="list-style-type: none"> Interface cable to control switchline with AvaSpec
AvaSphere-50-HOLD	<ul style="list-style-type: none"> WS-2(-GEM) tile holder for AvaSphere-50-LS-HAL-12V for gemology applications

Pre-configured spectrometers can be shipped within 24 hours