

AvaLight-HAL-S-MINI Tungsten-Halogen Light Source

AvaLight-HAL-S-MINI



From visible light to near infrared, that's where the AvaLight-HAL-S-Mini works best. The AvaLight-HAL-S-Mini is a compact, stabilized halogen light source, with adjustable focusing of the fiber connection, maximizing output power at the desired wavelength. This versatile light source also has adjustable output power to provide extra power or longer bulb life.

A filter-slot mounted on the front of the AvaLight-HAL-S-Mini accepts 1" round or 2" x 2" square filters, to block specific ranges of wavelengths or instantly lower the intensity.

The adjustable focus on the AvaLight-HAL-S-Mini helps you get the most out of your light source: it makes sure all possible power is transmitted through your optical fiber. Bulb replacement is easy and can be done in a matter of minutes.

Optionally a combined direct-attach cuvette holder and attenuator is available (CUV-ATT-DA-HAL). for attenuation you can use the in-line filter holder, FH-INLINE or the in-line attenuator, ATT-INL.

The optical output can be controlled through a dongle at the backside or from your spectrometer.

At the lowest setting, the light bulb has a color temperature of 2647K, but provides a significantly longer lifetime. The standard or medium setting changes the color temperature to 2759K and provides $\pm 30\%$ more power with a bulb lifetime of 4000 hours. The high power setting gives a color temperature of 2879K, about 70% more power compared to the long-life setting with a reduced lifetime of the bulb.

The AvaLight-HAL-S-Mini features an internal TTL-shutter, controllable from your AvaSpec spectrometer. This gives you the ability to use the auto-save dark option in our AvaSoft spectroscopy software.

Update 2020:

We have replaced the bulb of the AvaLight-HAL-S-Mini because of the discontinuation of our previous halogen bulb. The new light bulb has been especially developed to be as close to the previous version as possible. The AvaLight-HAL-S-Mini's appearance and performance are not affected by this change, so any previously installed bases can still be used, even if the light bulb needs replacement.

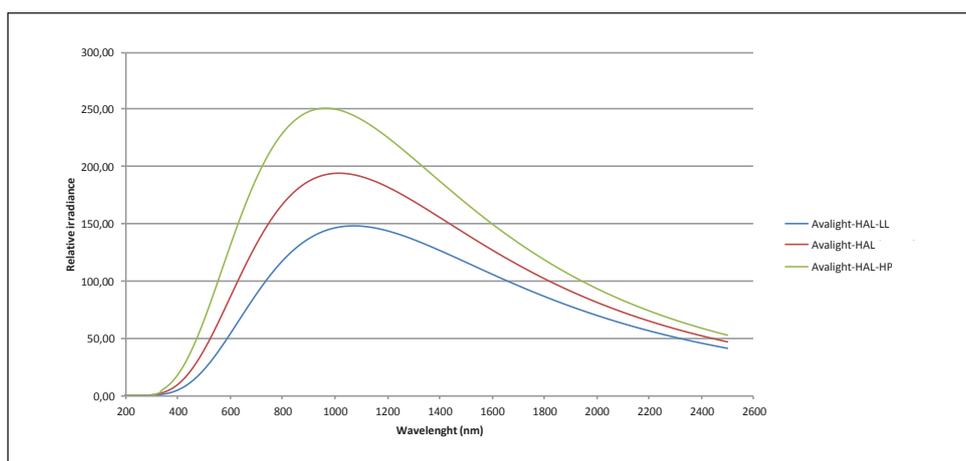


Figure 9 Spectral output of AvaLight-HAL-Mini

Technical Data

	AvaLight-HAL-S-Mini (standard)	AvaLight-HAL-S-Mini (long life)	AvaLight-HAL-S-Mini (high power)
Wavelength Range	360-2500 nm		
Stability	< 0.1%/°C		
Drift	< 0.1%/hour		
Time to stabilize	< 20 min		
Output to bulb	12.0 VDC/0.87A	10.8 VDC/0.8A	13.5 VDC/0.93A
Min. Optical power* 200 µm fiber	0.59 mWatt	0.35 mWatt	0.77 mWatt
Min. Optical power* 600 µm fiber	4.53 mWatt	3.53 mWatt	5.97 mWatt
Min. Optical power* 1000 µm fiber	12.1 mWatt	9.50 mWatt	15.9 mWatt
Bulb Color Temperature	2,759 K	2,647 K	2,879 K
Power requirement	12 VDC/2.08A		
Temperature range	0-55 °C		
Dimensions, weight	150 x 78 x 37 mm, 510 g		
Lifetime shutter	1,000,000 cycles (typical)		

* Optical power measured from 350-1100 nm

Separate Filters

GL-WG305-3	Separate 50 x 50 x 3 mm long-pass filter > 305 nm
GL-KG3-3	Separate 50 x 50 x 3 mm band-pass filter, transparent > 325 nm and < 700 nm
GL-BG28-3	Separate 50 x 50 x 3 mm band-pass filter, transparent > 360 nm and < 500 nm
GL-GG395-3	Separate 50 x 50 x 3 mm long-pass filter > 395 nm
GL-GG475-3	Separate 50 x 50 x 3 mm long-pass filter > 475 nm
GL-OG515-3	Separate 50 x 50 x 3 mm long-pass filter > 515 nm
GL-OG550-3	Separate 50 x 50 x 3 mm long-pass filter > 550 nm
GL-NG9-1	Separate 50 x 50 x 1 mm Neutral Density filter (transmission 10%, 400-1100 nm)
GL-NG9-2	Separate 50 x 50 x 2 mm Neutral Density filter (transmission 1%, 400-1100 nm)
GL-NG9-3	Separate 50 x 50 x 3 mm Neutral Density filter (transmission 0.1%, 400-1100 nm)

More filter types available, please contact us for ordering information

Ordering Information

AvaLight-HAL-S-Mini2	• 10W Tungsten Halogen lamp, fan cooled, incl. TTL shutter, needs extra PS-12V/2.08A power supply
AvaLight-HAL-S-Mini2-RM	• Rack-mounted version of AvaLight-HAL-S-Mini2
IC-DB26-2	• Interface cable AvaSpec-USB2/EVO platform to AvaLight-HAL-S-Mini2 for shutter and power setting
AvaLight-HAL-B-Mini2	• 10W Tungsten Halogen replacement bulb for AvaLight-HAL-S-Mini(2)
PS-12V/2.08A	• Power supply 100-240VAC/12VDC, 2.08A, necessary for AvaLight-HAL-Mini2
DONGLE-Mini-H	• Dongle for high power setting
DONGLE-Mini-L	• Dongle for long life setting