

# 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. It's a compact, stabilized halogen light source, with adjustable focusing of the fiber connection, maximizing output power at the desired wavelength. The 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 Inline Filterholder, FH-INLINE or the Inline attenuator, ATT-INL.

The optical output can be controlled through a dongle at the backside or from your spectrometer. At low setting the lamp has a color temperature of 2700K but provides over 13000 hours of lifetime. The standard or medium setting changes the color temperature to 2850K and provides 50% more power with a bulb lifetime of 4000 hours. The high power setting gives a color temperature of 3000K, double power compared to the long-life setting and gives you up to 1000 hours of lifetime.

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 AvaSoft spectroscopy software.

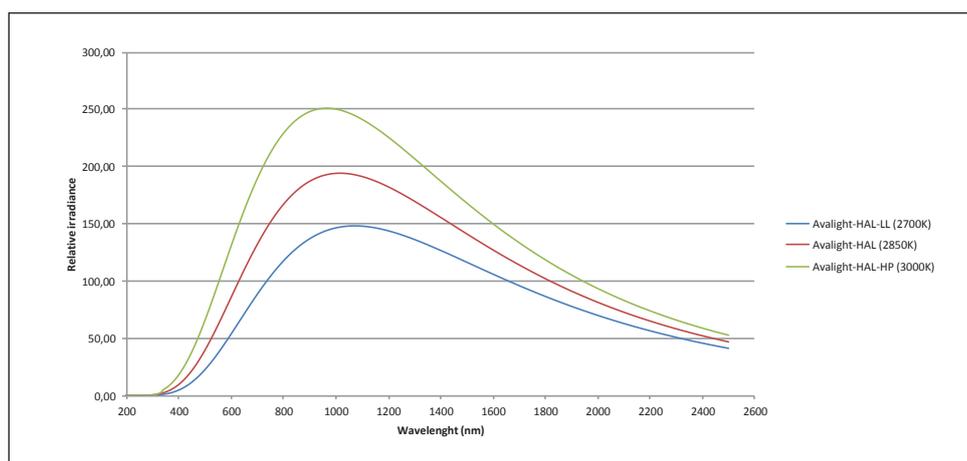


Figure 9 Spectral output of AvaLight-HAL-Mini

## Technical Data

	AvaLight-HAL-S-Mini (standard)	AvaLight-HAL-S-Mini (long life)	AvaLight-HAL-S-Mini (high power)
<b>Wavelength Range</b>	360-2500 nm		
<b>Stability</b>	± 0.1%/ °C		
<b>Time to stabilize</b>	Ca. 10 min.		
<b>Output to bulb</b>	12.0 VDC/ 0.83A	11.3 VDC/ 0.8A	14.1 VDC/ 1.0A
<b>Bulb Life</b>	4000 hrs	> 13000 hrs	< 1000 hrs
<b>Min. Optical power* 200 µm fiber</b>	0.5 mWatt	0.35 mWatt	0.7 mWatt
<b>Min. Optical power* 600 µm fiber</b>	4.5 mWatt	3.2 mWatt	6 mWatt
<b>Min. Optical power* 1000 µm fiber</b>	10 mWatt	7 mWatt	14 mWatt
<b>Bulb Color Temperature</b>	2,850 K	2,730 K	3,000 K
<b>Power requirement</b>	12 VDC / 2.08A		
<b>Temperature range</b>	0-55 °C		
<b>Dimensions, weight</b>	150 x 78 x 37 mm, 510 grams		
<b>Lifetime shutter</b>	1,000,000 cycles (typical)		

\* Optical power measured from 350-1100nm

## Separate Filters

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

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