

AVALIGHT-HAL-S-MINI



HALOGEN LIGHT SOURCE



The AvaLight-HAL-S-Mini is a compact, stabilized light source designed for the visible to near-infrared range. Its adjustable fiber connection focus maximizes output power at the desired wavelength, while the electrical power setting lets you choose between extra intensity or extended bulb life.

A front-mounted filter slot accepts 1" round or 2" x 2" square filters, allowing you to block wavelength ranges or quickly reduce intensity. Bulb replacement takes only minutes, ensuring minimal downtime.

VARIOUS POWER MODES

You can control the optical output via a rear-mounted dongle or directly from your spectrometer. Three power modes balance color temperature, output, and bulb life:

- **Long-life mode (2647K):** longest lifetime with reduced power.
- **Standard mode (2759K):** ~30% more power, ~2000-hour lifetime.
- **High-power mode (2879K):** ~70% more power, shorter lifetime.

More technical data about the different modes are found on the back on this datasheet.

An internal TTL shutter, controllable from your AvaSpec spectrometer, enables the automatic dark save function in AvaSoft software.

Since 2020, the light source has used a newly developed halogen bulb, engineered to closely match the discontinued original. The update preserves both appearance and performance, ensuring compatibility with all existing bases.

MORE DATA ON THE NEXT PAGE >

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
Bulb life	2000 h	7081 h	440 h
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

ORDERING INFORMATION

Order code	Ordering information
AvaLight-HAL-S-Mini2	10W Tungsten Halogen light source, 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, AvaLight-HAL-S-Mini(2)
PS-12V/2.08A	Power supply 100-240VAC/12VDC, 2.08A, necessary for AvaLight-HAL-Mini2
DONGLE-H	Dongle for high power setting
DONGLE-L	Dongle for long life setting

OPTIONS

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 bandpass filter, transparent > 325 nm and < 700 nm
GL-BG28-3	Separate 50 x 50 x 3 mm bandpass 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 ca. 10% 400-1100 nm)
GL-NG9-2	Separate 50 x 50 x 2 mm Neutral Density filter (transmission ca. 1% 400-1100 nm)
GL-NG9-3	Separate 50 x 50 x 3 mm Neutral Density filter (transmission ca. 0.1% 400-1100 nm)

More filter types are available, please contact us for ordering information

Discover all our empowering spectroscopy solutions on our website www.avantes.com

We reserve the right to make changes without prior notice. While every effort has been made to ensure all information in this document is accurate, Avantes accepts no liability for any inaccuracies.

