

Tungsten Halogen Light Source



The **AvaLight-HAL** is a compact stabilized halogen fan-cooled light source that can be used for the visible range and the near infrared. **The AvaLight-HAL** features adjustable focusing of the SMA connector to maximize light coupling into a fiber or fiber bundle with a diameter of up to 600 μm . A filter slot accepts 1" round or 2" x 2" square filters up to 3 mm thick. The lamp stability is achieved by a current stabilization. A fan regulates the airflow

around the heatsink to optimize the operation temperature. The AvaLight-HAL needs an extra PS-24V/1.25A 24 VDC power adapter.

The SMA-connector input into any fiber can be optimized by changing the focus. Bulb replacement is easy. With an internal jumper the optical output energy can be controlled. At "low" setting the source acts as a long life source with over 2000 hrs life time. At "medium" setting the color temperature goes up and the expected life time is about 1000 hrs. The "high" setting gives max output in the blue range, but reduces bulb life time to > 1000 hrs (see fig 8).

The Avalight-HAL-S has an internal TTL shutter that can be controlled from the AvaSpec so the auto-save dark option in the AvaSoft software can be used (extra IC-DB15-2 or IC-DB26-2 needed).

The filter holder can be easily replaced by a direct attach cuvette holder CUV-HAL (see section accessories) useful for fluorescence or absorbance measurements.

Optionally, the AvaLight-HAL(S) can be delivered in Rackmounted version, to be fully integrated in the 19" rackmount or 9.5" desktop housing.

Technical Specifications

	AvaLight-HAL (standard)	AvaLight-HAL (long life)	AvaLight-HAL (high power)
Power requirement	24 VDC / 1.25A		
Output to bulb	12.7 VDC/ 0.9A	11.3 VDC/ 0.8A	14.1 VDC/ 1.0A
Stability	± 0.1%		
Time to stabilize	Ca. 15 min.		
Bulb Life	1000 hrs	> 2000 hrs	< 1000 hrs
Optical power total from SMA connector	15 mWatt	11 mWatt	20 mWatt
Optical power 200µm fiber	0.5 mWatt	0.35 mWatt	0.7 mWatt
Optical power 600µm fiber	4.5 mWatt	3.2 mWatt	6 mWatt
Optical power 1000µm fiber	10 mWatt	7 mWatt	14 mWatt
Bulb Color Temperature	2.850 K	2.700 K	3.000 K
Power requirement	24 VDC / 1.25A		
Dimensions (mm)	132 x 110 x 44 mm		

Spectral Output

