

# AvaLight-DH-S Deuterium-Halogen Light Source

## AvaLight-DH-S



In need of more power than the AvaLight-DHc? The AvaLight-DH-S is Avantes' most powerful deuterium halogen source. Like the DHc it is also a combined deuterium and halogen light source, capable of transmitting light in the UV/VIS/NIR-range, but has 35 times more halogen output and up to 300 times more deuterium power. The source has a prominent 656 nm deuterium peak which can limit dynamic range (see AvaLight-DH-S-BAL as an alternative). It includes a focusing lens assembly, to fully utilize the possibilities and size of your fiber.

The AvaLight-D-S is a deuterium light source only, making it a great option for measurements in the UV range, 190-400 nm. The AvaLight-D-S-DUV version starts even lower at 175 nm, for your deep-UV experiments. This version also offers twice the intensity at 200nm.

The output of the AvaLight-DH-S is optimized for fibers or bundles up to 600 micrometers. For larger fibers the focal point is manually adjustable to optimize the light coupling into your fiber.

The AvaLight-D(H)-S features an integrated TTL-shutter and filter holder for filters of up to 50x50x5.0 mm.

- Combined Deuterium-Halogen
- UV-VIS-NIR
- Deep-UV optional
- Powerful

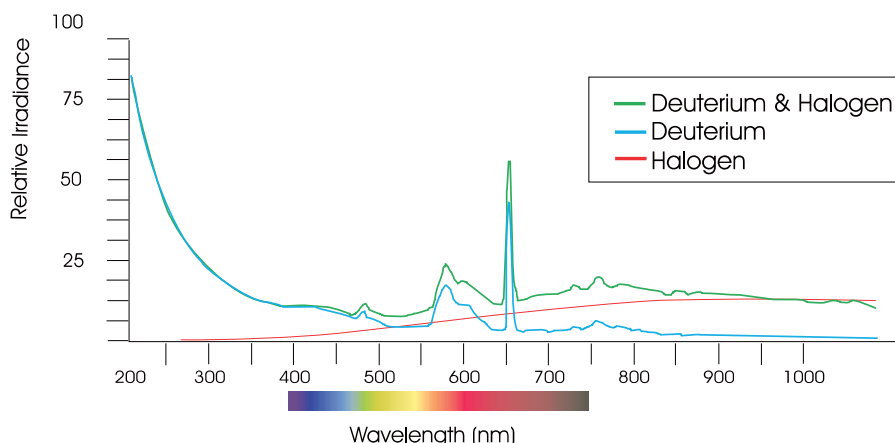


Figure 10 Spectral output AvaLight-DH-S

## Technical Data

	Deuterium (Deep-UV) Long life	Deuterium (Standard) Long life	Halogen
<b>Wavelength Range</b>	175-400 nm	190-400 nm	360-2500 nm
<b>Warm-up Time</b>	30 min.		20 min.
<b>Lamp Power</b>	78W / 0.75A		5W /0.5A
<b>Lamp Lifetime</b>	2000 h		1000 h
<b>Noise (AU)</b>	2x 10 <sup>-5</sup>		10 <sup>-4</sup>
<b>Max. drift</b>	± 0.5%/h		±0.1%/h
<b>Color Temperature</b>	-	-	3000 K
<b>Optical Power* in 200µm fiber</b>	11 µW	11 µW	43 µW
<b>Optical Power* in 600µm fiber</b>	72 µW	72 µW	239 µW
<b>Optical Power* in 1000µm fiber</b>	206 µW	206 µW	354 µW
<b>Power consumption</b>	90 Watt (190Watt for heating D-Lamp 4-5 sec.)		
<b>Power Requirements</b>	100-240VAC 50/60 Hz		
<b>Dimensions / Weight</b>	315 x 165 x 140 mm / ca 5 kg.		
<b>Lifetime shutter</b>	1,000,000 cycles (typical)		

\* total power for the specified wavelength range

For a table of separate 50x50 mm filters to install in AvaLight-D(H)-S see AvaLight-HAL.

## Ordering Information

<b>AvaLight-D-S</b>	• Deuterium light source, 190-400 nm, incl. TTL shutter, -SR fibers needed
<b>AvaLight-DH-S</b>	• Deuterium-Halogen light source, 190-2500 nm, incl. TTL shutter, -SR fibers needed
<b>AvaLight-D-S-DUV</b>	• Deep-UV deuterium light source, 175-400 nm , TTL shutter, -SR fibers needed, 2000h
<b>AvaLight-DH-S-DUV</b>	• Deep-UV deuterium-halogen light source, 175-2500 nm , TTL shutter, -SR fibers needed
<b>IC-DB26-2</b>	• Interface cable AvaSpec-USB2/EVO platform to AvaLight-D(H)S-BAL
<b>AvaLight-D-B</b>	• Replacement deuterium bulb for AvaLight-D/AvaLight DH-BAL light source
<b>AvaLight-D-B-DUV</b>	• Replacement deep-UV deuterium bulb for AvaLight-D/AvaLight DH-BAL light source
<b>AvaLight-DH-B</b>	• Replacement halogen bulb for AvaLight-DH-BAL light source
<b>CUV-DA-DHS</b>	• Direct-attach cuvette holder for AvaLight-D(H)S-BAL