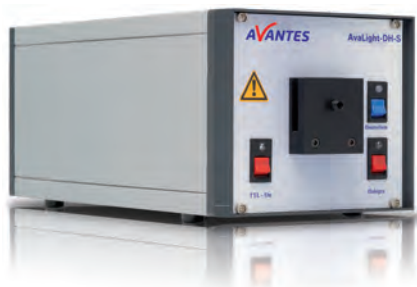


AvaLight-DH-S Deuterium-Halogen Light Source

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

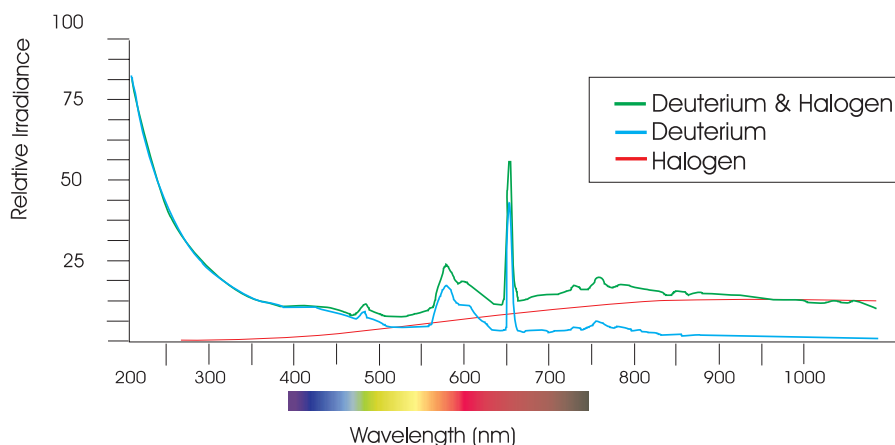


Figure 10 Spectral output AvaLight-DH-S

Technical Data

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

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