



ILD-D2-QH Deuterium & Quartz Halogen Source

The ILD-D2-QH is a general purpose broad-band illuminator spanning the spectral range 200-2500nm.

Housing a 30W deuterium lamp and a 100W quartz halogen lamp with automated selection between the two, the ILD-D2-QH can be mounted to the entrance slit of any Bentham monochromator or spectrometer.

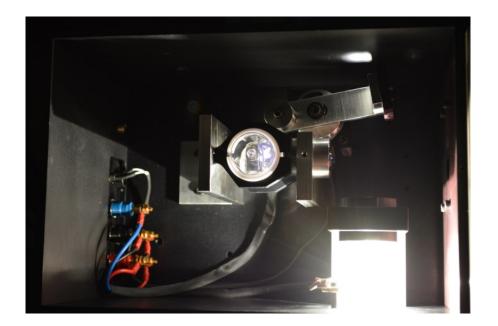
Efficient coupling is ensured by using condenser lenses for both sources that match the monochromator f/#.

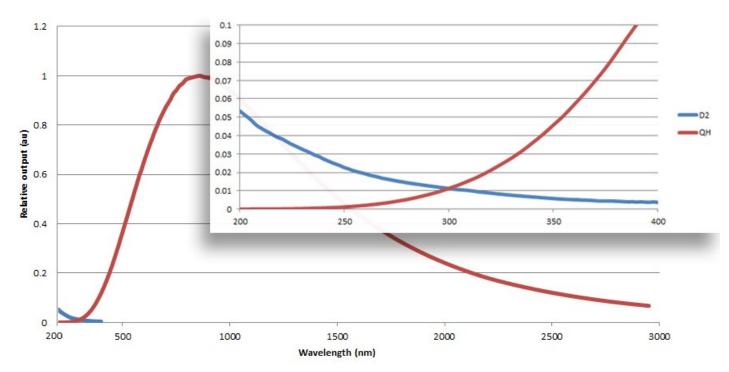
Product Features

- Includes deuterium and quartz halogen light sources
- Automated source selection
- Mounts to entrance slit of any Bentham monochromator/ spectrometer

Product Benefits

- High radiance 200-2500nm
- Long lamp life time
- Polyvalent
- Wide spectral range of use
- Suitable input to single monochromators

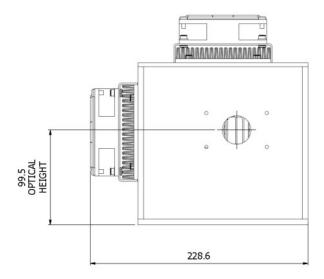


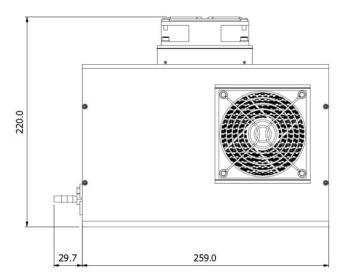


Specification

| Deuterium Lamp | |
|------------------------------|---|
| Nominal lamp rating | 30W |
| Operating current | 300mA DC |
| Operating voltage | 100V |
| Lamp lifetime | 2000h |
| Envelope material | Synthetic quartz |
| Coupling | Fused silica, plano-convex condenser lens 25mm diameter |
| Spectral range | 200-400nm |
| Recommended power supply | Bentham 706 (Part PSU_706) |
| Quartz Halogen Lamp | |
| Lamp rating | 100W |
| Operating current | 8.500 A |
| Lamp lifetime | 2000h |
| Coupling | Fused silica, bi-convex condenser lens 25mm diameter |
| Base | GY6.35 |
| Nominal CCT | 3300K |
| Spectral range | 250-2500nm |
| Recommended power supply | Bentham 610 (Part PSU_610) |
| Source Selection | |
| Mechanical | Solenoid-based swing away mirror |
| Energisation voltage | 12V, derived from Bentham monochromator |
| Source selected energised | Deuterium |
| Source selected de-energised | Quartz halogen |
| General | |
| Monochromator interface | Interface via four clearance screw (M3) holes |
| Dimensions (mm) | 229Wx 259Lx 220H |
| Weight | 3 kg |
| Source cooling | 2x 12V fans, driven from single PSU_610 |
| | |

Dimensions (mm)





Options

Optical Chopper: Integrated 5-slot optical chopper at exit of source to modulate light level at plate to attach to monochromator entrance slit for frequencies from 10-500 Hz. Required in applications in infrared and in measurements performed in presence of secondary/ambient illumination.

Quick Change Adaptor: Dove-tail interface ease of changing light sources.

Ordering Information

| ILD-D2-QH | Dual source with 30W deuterium and 100W QH, no optical chopper |
|-----------------|--|
| ILD-D2-QH-CH-QC | Dual source with 30W deuterium and 100W QH, with integrated optical chopper, QC mount $$ |
| 27441 | Spare 30 W deuterium lamp |
| 09101 | Spare 100 W QH lamp |
| PSU_706 | Deuterium lamp power supply |
| PSU_610 | Constant current lamp power supply |

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