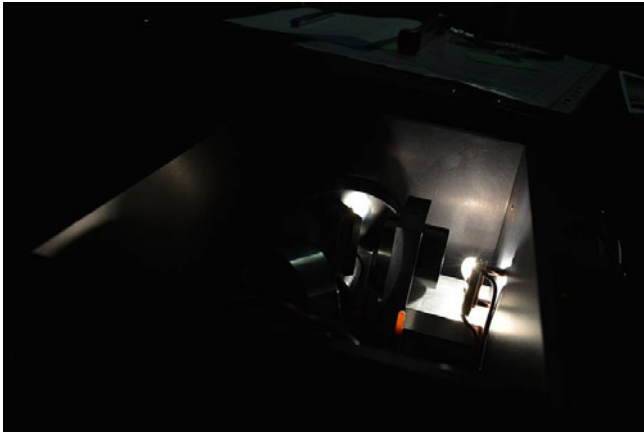


# B-ILD-QH-IR

## Halogen-SiN source (350 nm-30 μm)



The B-ILD-QH-IR is a broadband illuminator for use throughout the visible to the far infrared.

Housing a 100 W QTH lamp and a 40 W SiN IR emitter with automated selection between the two, efficient coupling is ensured by CaF<sub>2</sub> condenser lens (QTH) and an off-axis elliptical reflector (SiN).

Options include the integration of an optical chopper and quick change adaptor to facilitate mounting to monochromator entrance slit.

Stable operation of both sources can be ensured by using the B-PSU\_610 current stabilised lamp power supply.

Ordering information	
<b>B-ILD-QH-IR</b>	Dual source with 100 W QH and 40 W SiN IR emitter
<b>B-ILD-QH-IR-CH</b>	Dual source with 100 W QH and 40W SiN IR emitter, integrated optical chopper
<b>B-ILD-QH-IR-CH-Arrest</b>	Dual source with 100 W QH and 40 W SiN IR emitter, integrated arrestable optical chopper
<b>B-ILD-QH-IR-CH-QC</b>	Dual source with 100 W QH and 40 W SiN IR emitter, integrated optical chopper with QC mount
<b>B-09101</b>	Replacement 100 W QH lamp
<b>B-19076</b>	Replacement 40W SiN IR emitter
<b>B-PSU_610</b>	Current stabilised lamp power supply

### Core benefits

- Wide spectral coverage in a single solution
- Suitable for a wide range of vis-FIR applications
- Automated lamp selection
- Long lifetime lamp and reliable operation

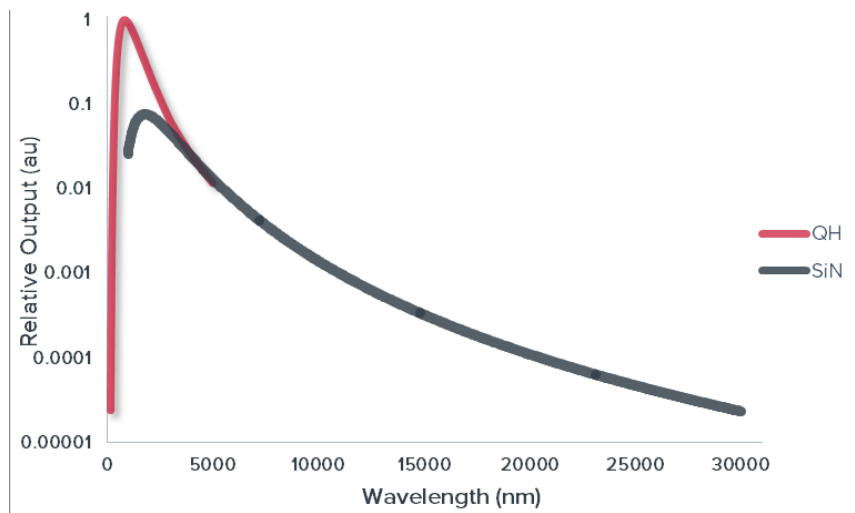
### Features

- 100 W QTH lamp and 40 W SiN IR emitter housing with air cooling
- CaF<sub>2</sub> condenser lens QTH lamp coupling
- Off-axis elliptical reflector SiN IR emitter coupling
- Automated source selection via solenoid-based swing away mirror
- Interface to range of Bentham monochromator

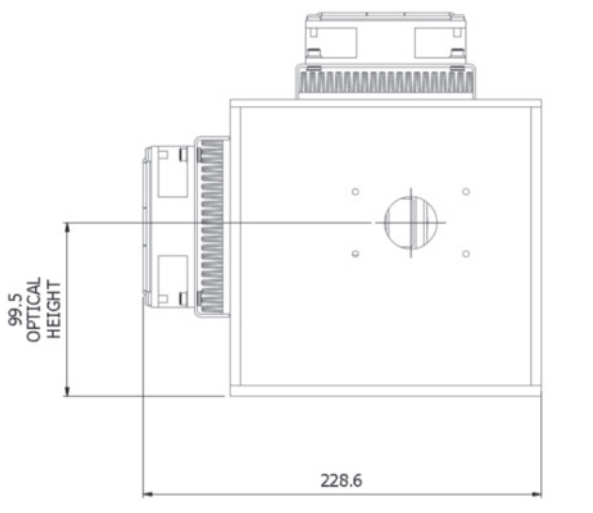
Specifications	
<b>Electro-optical (QTH)</b>	
Lamp type	Quartz tungsten halogen lamp, G6.35 base
Nominal lamp power and voltage	100 W, 12 V
Operating current	8.5 A DC
Coupling	CaF <sub>2</sub> fused silica, bi-convex condenser lens 25 mm diameter
Expected lamp lifetime	2000 h
<b>Electro-optical (SiN IR emitter)</b>	
Lamp type	Silicon nitride incandescent source
Nominal lamp power and voltage	40 W, 12 V
Operating current	3.3 A DC
Temperature	1250 K
Coupling	Off-axis elliptical reflector 60 mm diameter
<b>Mechanical</b>	
Connector	4 mm socket
Compatibility	4 x M3 clearance holes in Bentham slit pattern
Dimensions	265 L x 213 W x 170 H (mm)
Source cooling	2 x 12 V fans, driven from single B-610 current stabilised lamp power supply
Lamp selection	Solenoid-based swing away mirror
Energising voltage	12 V, derived from Bentham monochromator

# B-ILD-QH-IR

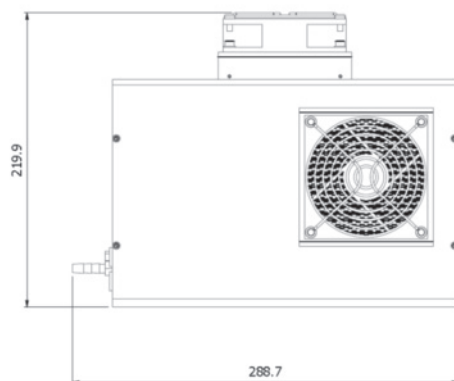
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Typical relative output of B-ILD-QH-IR



B-ILD-QH-IR dimensions (mm) - front view



B-ILD-QH-IR dimensions (mm) - side view