

ILD-QH-IR
Dual Quartz Halogen & SiN IR Source
300nm-30 μ m

ILD-QH-IR Dual Quartz Halogen & SiN IR Source

The ILD-QH-IR is a general purpose broad-band illuminator spanning the spectral range 300nm-30 μ m.

Housing a 100W quartz halogen lamp and 40W SiN IR emitter with automated selection between the two, the ILD-QH-IR can be mounted to the entrance slit of any Bentham monochromator or spectrometer.

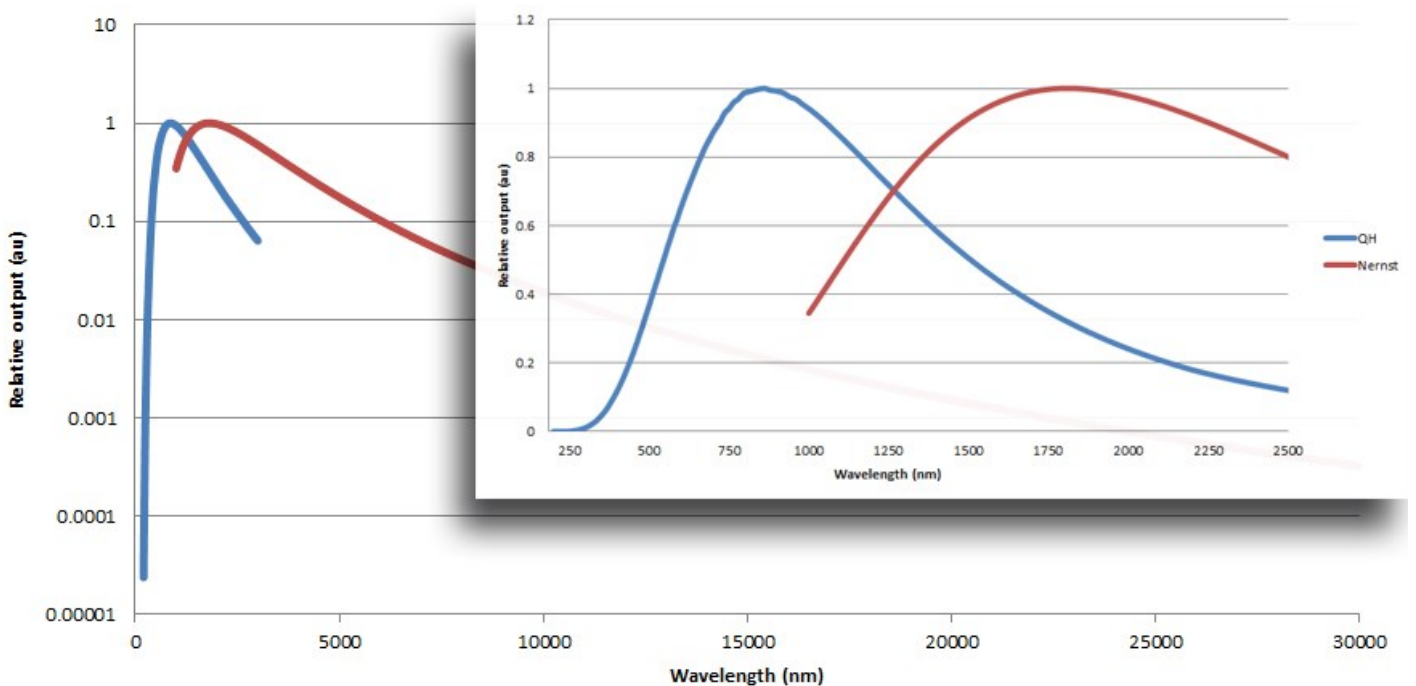
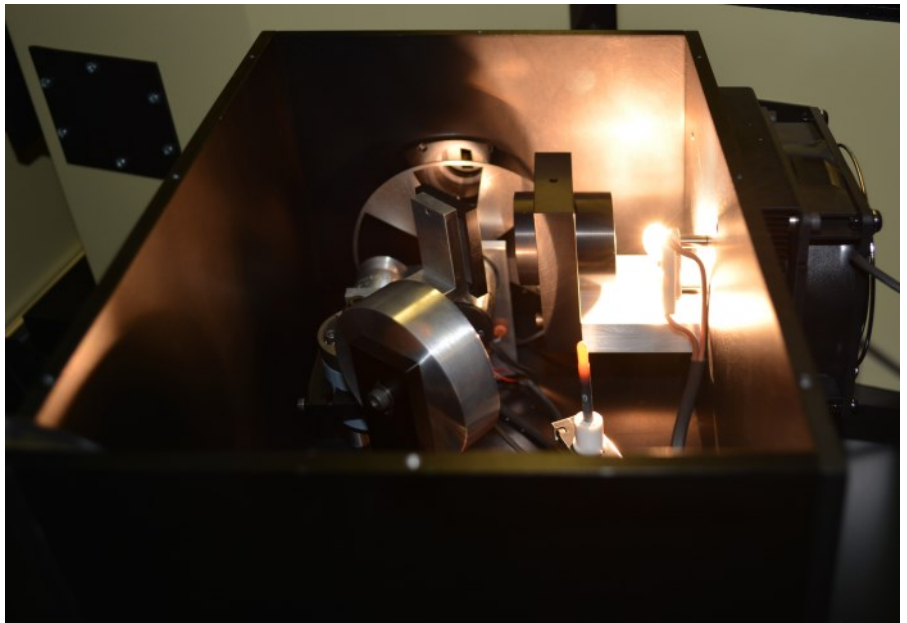
Efficient coupling is ensured by using a condenser lens for the QH lamp and off-axis elliptical for the SiN IR emitter reflector which match the monochromator f/#.

Product Features

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

Product Benefits

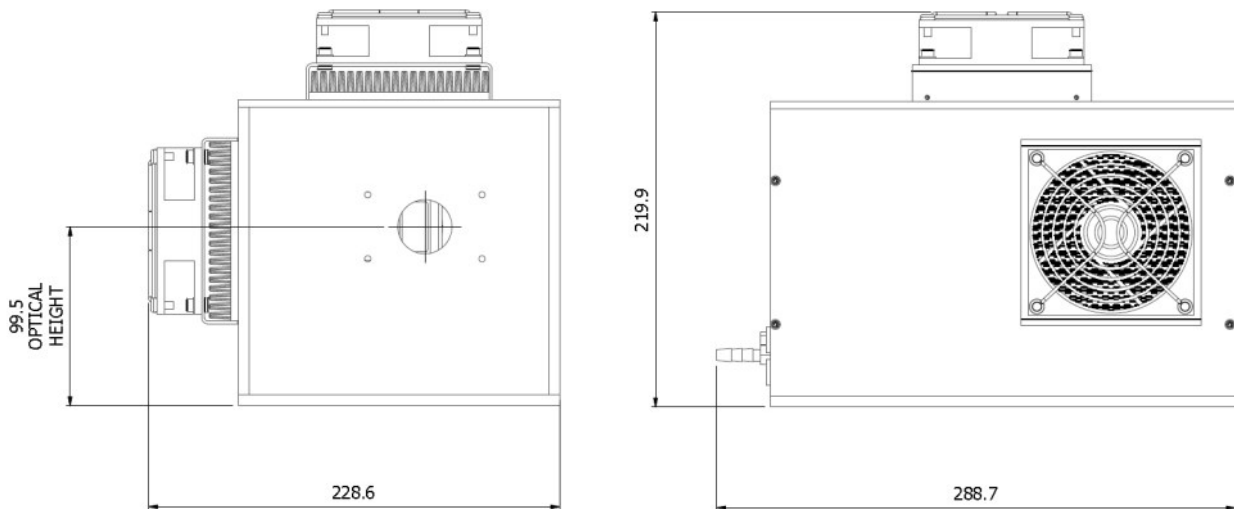
- High radiance 300nm-30 μ m
- Long lamp life time
- Polyvalent
- Wide spectral range of use



Specification

Quartz Halogen Lamp	
Lamp rating	100W
Operating current	8.5 A
Rated voltage	12V
Lamp lifetime	2000h
Coupling	Fused silica, bi-convex condenser lens 25mm diameter
Base	GY6.35
Nominal CCT	3300K
Spectral range	300-2500nm
Recommended power supply	Bentham 610 (Part PSU_610)
SiN IR Emitter	
Lamp rating	40W
Operating current	3.3 A
Rated voltage	12V
Lamp lifetime	5000h
Coupling	Off-axis elliptical reflector 60mm diameter diameter
Spectral range	1-30 μ m
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	SiN IR emitter
Source selected de-energised	Quartz halogen
General	
Monochromator interface	Interface via four clearance screw (M3) holes
Dimensions	229Wx 259Lx 220H mm
Weight	3 kg
Source cooling	1x 12V fan. Driven from PSU_610

Dimensions (mm)



Options

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

Arrestable Optical Chopper: Arrest feature added to above comprising electromagnet to stop optical chopper at open location to allow CW measurements.

Quick Change Adaptor: Dove-tail interface plate to attach to monochromator entrance slit for ease of changing light sources.

Ordering Information

ILD-QH-IR	Dual source with 100W QH and 40W SiN IR emitter, no optical chopper
ILD-QH-IR-CH	Dual source with 100W QH and 40W SiN IR emitter, integrated optical chopper
ILD-QH-IR-CH-QC	Dual source with 100W QH and 40W SiN IR emitter, integrated optical chopper with QC mount
09101	Spare 100 W QH lamp
19076	Spare 40W SiN IR emitter
PSU_610	Constant current lamp power supply