

IL8 Nernst Infrared Illuminator

User Notes



Overview

The IL8 is a general-purpose infra illuminator suitable for the range 1-20 μ m, fitted with a Nernst glower element, a ceramic which glows with a black body temperature ~1500K.

A single quartz condenser lens is used to fill the height and width of the slit and to match to the f/4 optics of the monochromator.

Mechanical

The IL8 may be coupled directly to the entrance slit of any Bentham monochromator via M3 screws, can be used in the stand-alone configuration, or multiple sources may be re-united around a dual or triple source changeover unit.

Lamp Operation

It is recommended to operate the lamp from a constant current supply such as the Bentham 605/608; the required conditions are as follows:-

Source	Lamp Rating (W)	Current Supply (A)	Typical Operating Voltage (V)
Nernst	40	7.500	~4.0

This lamp takes approximately five minutes warm up time- a heater coil heating the ceramic to incandescence.

For correct lamp operation, the following should be observed.

- Ensure the correct polarity is respected at all times
- Ensure that the fan is connected at all times
- Do not touch bulb with bare fingers
- Do not run the lamp at a current lower than that at which it was calibrated
- The lamp requires approximately five minutes warm-up time

Lamp Replacement

This is a specialist lamp, and particularly fragile. Please contact Bentham to source lamp and for installation instructions.

WEEE statement:

Bentham are fully WEEE compliant, registration number is WEE/CB0003ZR.
Should you need to dispose of our equipment please telephone 0113 385 4352 or 4356, quoting account number 135419.



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