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Deuterium lamp.

Lambda PHYS link for LLE-8 Hydrogen

### LLE-8 Hydrogen-Deuterium Lamp



#### Features

- ▶ Hydrogen-Deuterium spectrum (roughly 2:1 spectral peak ratio)
- ▶ Ideal lamp for Balmer series experiment
- ▶ Designed for continuous operation
- ▶ Height of lamp adjustable with post/post holder

#### Introduction

The LLE-8 Hydrogen-Deuterium Lamp is a gas discharge light source designed for use in wavelength calibration and spectroscopic experiments in academic and research settings. It is particularly valuable for conducting Balmer series experiments, which are used to investigate the hydrogen atom's emission spectrum.

Compared to traditional hydrogen arc lamps, the LLE-8 Hydrogen-Deuterium Lamp offers superior stability and intensity, making it more reliable for continuous operation without the need for frequent shutdowns. This makes it a highly practical option for spectrometer calibrations and various other optical experiments.

### Specifications

Description	Specifications
Hydrogen Spectrum (nm)	410.18, 434.05, 486.13, 656.28
Deuterium Spectrum (nm)	410.07, 433.93, 486.01, 656.11
Spectral Peak Ratio (Hydrogen/Deuterium)	~ 2:1
Housing Dimensions	length 220 mm, diameter 50 mm
Windows (two opposite windows)	18 mm x 40 mm, centred at half height of the housing
Housing Support	range of height adjustment 100 mm, base thickness 15 mm

### Part List

Description	Qty
Bulb	1
Housing	1
Power Supply	1





