

## Helium Level Meter: HLM



### Functional Parameters

**Resolution:** 1mm.  
**Linearity:** 1 LSD (Least Significant Digit).  
**Accuracy:** 0.5% +/- 1 LSD.  
**Compliance voltage:** 55 +/- 5V.  
 Maximum active length per channel: 2000mm.

### Physical Dimensions

**Size:** 144 mm wide x 72 mm high x 200 mm deep.  
**Weight:** 1.5 kg.  
 The Case can be bench or panel mounted.

### Front panel

**Display:** 8 Character large (9 mm) backlit Liquid Crystal Display.  
**Switches:** 3 momentary make switches to control functions.

### Back panel

**Power input:**  
**Mains:** 95 - 125V or 190 - 250V AC (switchable) via fused, switched IEC mains input.  
**Auxiliary:** 24V AC/DC via power jack socket.  
**Probe input:** One 7 pin connector.  
**Analogue output & External Inhibit:** In shared 4 way MOLEX connector.  
 Analogue output is either

- 4-20mA (option A),
- Analogue voltage - settable for mV/mm output (option V),
- or Analogue voltage 0 - 10V output (option T) depending on option selected.

All options are short circuit protected.  
 External Inhibit. Opto-isolated input, triggered by 5 - 20V or 3 - 15mA at terminals.



**Serial port Connector:** Standard DB9-F connector.

## Options

In addition to the analogue output options:

### Control and alarm (option C)

Two independent control signals are provided by no-volt relay contacts, rated at 24V 0.5A ac or dc. Alarm signal provided by an open collector output, 50mA maximum. Set points and channel assignment via the front panel controls.

**Connector:** DB9-M connector on the back panel.

### Two probe input (option 2)

Provides a second standard 7 pin probe input socket on the back panel, and a second probe cable. Allows two helium and/or nitrogen probes to be connected at the same time.

### Lemo connector probe input (option L)

Provides the facility to connect one or two probes via one Lemo connector instead of one (or two) standard 7 pin connector(s).

Connector: 1B series, 8 pin Lemo.

### Second analogue output (option Z)

For units with either the 2 or L options, the Z option provides a second analogue output corresponding to the reading from the second probe. When this option is selected, the External Inhibit is not available, as the second output is fed from the second pair of pins in the shared MOLEX connector. Both analogue outputs are of the same type, that is A, V or T.

### Probe range and calibration

**Option G:** Standard probes

**Option S:** Customer supplied probe

## Contact us

You can contact Scientific Magnetics through our website [www.scientificmagnetics.com](http://www.scientificmagnetics.com) We will be delighted to discuss your requirements for superconducting and cryogenics systems.

