

HPM & HPM-R

HANDHELD PURGE MONITOR



- Wide range of oxygen level measurement
- On-board data logging
- Help to reduce costs
- Improves weld quality
- Optional carbon dioxide content measurement
- Optional remote flow control to automate the purging process
- Three models available

Accurate and reliable purge oxygen measurement.

The HPM is a rugged, battery-powered handheld purge monitor that display readings in percent (%) or parts per million (ppm) and available in three models, the HPM-01, the HPM-02, and the HPM-R.

The cost-effective HPM-01 uses a non-depleting optical oxygen cell to measure levels from ambient (21.00%) down to 0.01%, while the advanced HPM-02 combines this optical technology with a miniature, low-power zirconia sensor to measure from ambient down to 1 ppm.

Designed for data tracking, the HPM features standard on-board data logging, saving purge data directly as a .CSV file for easy download and integration into MS Excel reports.

Housed in a rugged aluminium case with IP-rated push buttons, the unit features a full-colour OLED display that changes background colour based on user-set limits to visually guide the welding process.

The screen lights up red when oxygen is above the high limit, yellow when between limits, and green once the low limit is achieved, signalling that welding can safely begin.

For expanded utility, any model can be equipped with an optional sensor to measure and log carbon

dioxide content from 0.5% to 59.9%. Furthermore, an optional remote flow control box can be connected to automate the process; it triggers gas flow only when the HPM 'Start' button is pressed and manages flow rates from 4 LPM to 80 LPM, ensuring an optimized, cost-effective, and efficient purge.

In addition, all units have optional sensors for both dewpoint and pressure measurement.

HPM-R

With all the functions of the original HPM units, the HPM-R features a rugged stainless steel case with protected connections and screen, perfect for nuclear applications.



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General Specifications

Applications	Inert Welding Gas Purging
Memory	16GB Internal Flash Drive
Screen	2.6-inch Full Colour OLED
Operating Temperature	0 - 50°C
Maximum Dimensions	164 x 95 x 55mm
Weight	1.1Kg (excluding Accessories and Charger)
Battery Life	Typically 6 to 12 Hours
Battery Type	Li-Ion 7.4V 2.6Ah (19.24Wh) Rechargeable
Battery Charger	External 90-240V AC, Auto Selection, 2 Hour Charge Time

Measured Parameters

HPM-01	Optical Sensor
Oxygen Level	21.00% - 0.01%
HPM-02	Combined Optical and Zirconia Sensor
Oxygen Level	210000 - 1ppm (21.00% - 1ppm)

Optional Sensors

Carbon Dioxide Level	0.5 - 59.9%
Dewpoint	+20°C to -60°C (17,000 - 10ppm)
Pressure	0 - 1000mbar (0.01 mbar Resolution)



HPM-01 / HPM-02



HPM-R

Full calibration certification provided, traceable to The National Physical Laboratory (NPL), UK.

The Validation Centre (TVC) Limited reserves the right to alter or change product specifications without prior notice. Images are representative of full optional additions installed; delivered equipment and software may vary depending on options purchased.



THE VALIDATION CENTRE (TVC) LIMITED

Unit 15, Brinell Way, Great Yarmouth, Norfolk,
NR31 0LU, United Kingdom

+ 44 (0) 1493 443800

sales@tvcalx.co.uk

www.tvcalx.co.uk