

HPM

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
- Two models available



Accurate and reliable purge oxygen measurement.

The HPM is a rugged, battery-powered handheld purge monitor that displays readings in either percent (%) or parts per million (ppm), depending on the model.

Two HPM models are available, the HPM-01 and the HPM-02. The HPM-01 is a cost-effective option that uses a simple non-depleting optical oxygen cell to measure oxygen levels from ambient (21.00%) down to 0.01%. The HPM-02 is a more advanced model that combines the technology of the HPM-01 with a miniature, low-power zirconia sensor to measure oxygen levels from ambient (21.00%) down to 1ppm in both percent (%) and parts per million (ppm).

Both HPM models come with standard on-board data logging. The HPM saves purge data as a .CSV file, which can be easily downloaded to a PC and integrated into an MS Excel report.

The HPM is housed in a rugged aluminium case with IP-rated aluminium push buttons. The full-colour OLED display changes colour to show when the user-set oxygen levels have been achieved. The user can set upper and lower oxygen levels. When the oxygen level is above the high limit, the display background will be red, indicating that the oxygen level is too high, and welding should not be performed. When the measured level is lower than the high limit but above the low limit, the screen background will be yellow,

indicating that the oxygen level is safe for welding but not ideal. Finally, when the low limit is achieved, the screen will change to green, indicating that the oxygen level is safe for welding and welding can begin.

Either HPM model can be equipped with an optional carbon dioxide content measurement. This enables the unit to measure, display, and log oxygen levels along with carbon dioxide content from 0.5% to 59.9%.

A remote flow control box can be connected to the HPM to automate the purging process. The flow control box will only start the gas flow when the 'Start' button on the HPM is pressed. The flow rate can be set from 4 LPM to 80 LPM, ensuring that only the optimum amount of gas is used for the purging process. This results in quick, accurate, and efficient purging, as well as cost savings.



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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 - 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 Carbon Dioxide Sensor

Carbon Dioxide Level	0.5 - 59.9%
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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.



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