



# WATERBOY LP2

## Microprocessor Portable Moisture Analyzer

Industrial Gas

Manufacturing

Natural Gas

Medical & Aviation

Aerospace & Military

Glove Box

Specialty Gases

### Microprocessor-based Simplicity

The Portable Moisture Measurement Solution. The MEECO **WaterBoy LP2™** offers a cost-effective solution for reliable, portable **low pressure** moisture analysis. Utilizing our time-proven electrolytic technology, it features new microprocessor-driven electronics. The simplicity of the **WaterBoy LP2's** three-button interface makes changing display options effortless. Now, with the push of a button, you can select from five different display options.

Its modular design and sturdy construction are ideal for field conditions. The **WaterBoy LP2** is equipped with an internal 24 VDC lead acid rechargeable battery, in addition to a 110 VAC transformer. And, with the optional RS-232 port, you can send data to a printer, a computer, or other control device.

### Exceptional features include:

- ❑ **Stable Value Indication / Low Battery Indication**
- ❑ **Units of Measure:** Microprocessor-based electronics allow a choice of display options including ppmV, ppmW, lbs/mmscf, or °C and °F dewpoint
- ❑ **Three-Button User Interface:** Mode/Enter key, along with simple Up and Down keys, make using the menu quick and simple
- ❑ **LCD Display:** Integral digital display allows direct indication at point of use, and quick field configuration of the control parameters. Also includes low battery indicator light.
- ❑ **Scalable Output:** Flexibility to change output scales in field. No need to replace electronic components. Simply access menu via Mode/Enter key and select output scale.
- ❑ **On-line Verification:** Use simple Delta Flow procedure to quickly verify sensor linearity and performance on-line.
- ❑ **Wide Dynamic Range:** From 0.5 ppmV to 1,000 ppmV moisture
- ❑ **Freedom from Calibration:** MEECO's electrolytic technology is based on Faraday's Law, providing absolute accuracy, traceable to national metrology standards
- ❑ **Approvals:** FM/CSA Approved Class 1 Division 2, Non-incendive. The Electrolytic Technology is specified by the European Pharmacopoeia for moisture analysis in medical gases.

# WaterBoy LP2

## Microprocessor-based Portable Moisture Analyzer



### Exceptional features include (continued):

- ☐ **Battery Operated:** Equipped with an internal 24 VDC lead acid rechargeable battery, in addition to a 110/220 VAC transformer
- ☐ **Savvy Communications:** With the optional RS-232 port, you can send data to a printer, a computer, or other control device.
- ☐ **Low Cost of Ownership:** Two-year instrument warranty, with a two-year calibration of the cell, as well; plus, fixed price, low-cost Cell Refurbishment

<b>Performance</b>	
Detection Limit (LDL):	0.5 ppmV
Operating Range:	0-1,000 ppmV with 0.1 ppm resolution (100cc flow units) for inert gases 0-5,000 ppmV with 1 ppm resolution (10cc flow units) for inert gases
Accuracy (greater of):	±5% of reading or 0.4 ppmV, whichever is greater **
Operating Temperature:	-20°C to +60°C (-4°F to 140°F)
User Interface:	3-key touch pad
Display:	1 line, 16-character alphanumeric LCD 3/8" high digits
Display Options:	ppmV, ppmW (requires user input of molecular weight), °C or °F dewpoint and lbs/mmscf (Note: °C or °F dewpoint is referenced to atmospheric pressure. Pressure dewpoint available with user input of operating pressure).
<b>Gas Handling System and Conditions</b>	
Gas connections:	1/8" Compression (consult factory for gas compatibility)
Inlet Pressure:	5-100 psig (0.34-6.9 barg)
Flow Rate:	Sample: 100 sccm (standard model); 10 sccm (usually used in natural gas) Bypass: 1,000 sccm
<b>Physical</b>	
Dimensions:	12" (30.5 cm) H x 8 3/4" (22.2 cm) W x 6 1/4" (15.9 cm) H
Weight:	17 lbs. (7.7 kg)
<b>Electrical</b>	
Alarm indicators:	0-1 VDC output into 2k ohms or greater (standard). Field range programmable. Isolated RS232 (optional). Reduces battery operation time by 50%. (Not FM approved)
Power requirements:	Internal 24 VDC lead acid rechargeable battery with a 2.6 A hour rating (suitable for 5-day typical operation at room temperature) External 24 VDC MEECO-supplied 110 VAC wall transformer. (Unit operable while charging)
Signal Output:	0-1 VDC output into 2k ohms or greater RS - 232 Communications – Optional

\* For Oxygen (mixtures) APO cell is required, for Hydrogen (mixtures) APRH cell is required.

\*\*in pure O2 ± 10% of reading/3 ppm, whichever is greater

**Service with a Big Smile** 😊: The **WaterBoy LP2** comes with a full two-year Certificate of Calibration. The cell can easily be replaced in the field, with no need to disconnect the unit from the sample stream! Also, spare cells now have a two-year storage life if kept in their sealed shipment bags.