



WATERBOY 2+

Micro-Processor Portable Moisture Analyzer

Industrial Gas

Manufacturing

Natural Gas

Medical & Aviation

Aerospace & Military

Glove Box

Specialty Gases

Carry Proud with the WaterBoy 2+ Portable Moisture Analyzer

Supporting Manufacturing, Utilities, and Industrial Gas users since the early 1950s, MEECO portable analyzers stand up to the test of time, keeping you confident in your measurement results. Wherever your work takes you, our latest offering, the **WaterBoy 2+**, is good to go, with its backlit panel display for foggy days and dark nights; its Battery Life indicator to assure that you are never down; easily accessible batteries for swap-out convenience; and ergonomic shoulder strap whether you're lugging gear to a switchgear room or balancing in a bucket truck. We even attended to little details, like keepers for your caps!

Best of all, the **WaterBoy 2+** features MEECO's refined and powerful Absolute Electrolytic Technology, renowned for linearity, precision, and NIST-traceability. That makes it perfect for compliance with regulatory protocols and for validation of other relative technologies. Our proven stability also prevents drift and obviates the need for routine field calibration.

MEECO has been doing this for a long time, and it shows! Globally accepted, our analyzers last well beyond typical obsolescence, becoming trusted companions to generations of users.

Exceptional features include:

- ❑ **Wide Dynamic Range:** From 0.5 ppmV to 1000 ppmV moisture
- ❑ **Units of Measure:** Micro-processor-based electronics allow a choice of display options including ppbV, ppmV, ppmW, °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
- ❑ **Freedom from Calibration:** MEECO's electrolytic technology is based on Faraday's Law, providing absolute accuracy, traceable to national metrology standards
- ❑ **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

WaterBoy 2+

The **Waterboy 2+** and its long line of predecessors have performed loyally over a host of critical applications, from assuring weld integrity to aerospace ground control, and, most recently, hydrogen qualification for diamond cutting! Its modular design and sturdy construction make the **Waterboy 2+** a robust and reliable solution. Here is a sampling of the worlds we serve:

- ❑ **Bulk Gas Truck Delivery:** Validate gas quality at your point of delivery, since temperature, exposure to ambient, or even contamination from leaks in the delivery system can cause specifications to depart from those achieved prior to truck-fill.
- ❑ **Spot-check for Welding Gases:** The **WaterBoy 2+** helps prevent weak and corroded welds that can lead to incalculable damage. Moisture in the air around the welding point will cause the weld to weaken. “Shielding” gases and gas mixtures blanket the weld point with dry gas, pushing the humidity away. Such shielding gases must be certified for dryness to avoid moisture contamination
- ❑ **Protect Air Force Pilots:** Around the world, air force pilots avoid hypoxia with aviation oxygen that must be low enough in moisture to avoid hazardous freezing in the delivery lines, but not too dry for the lungs to inhale

In addition, it’s always wise to have a **WaterBoy 2+** as a back-up in the event of an emergency or planned calibration of your on-line analyzers. **NOTE:** In addition to its battery, the **WaterBoy 2+** comes complete with a power cable, so it can operate continuously as needed.

Specifications:

Detection Limit (LDL):	0.5 ppmV
Operating Range (for inert gases):	0.5 ppmV – 1,000 ppmV (100sccm flow)
Accuracy:	±5% of reading or 0.4 ppmV, whichever is greater In Oxygen: ±10% of reading or 3 ppmV, whichever is greater
Cell type (P ₂ O ₅)	APR, APO*, or APRH*
Gas Matrices Library:	Inert gases, Oxygen, Hydrogen and others, including gas mixtures. For other gases, please consult factory. *For Oxygen (mixtures) APO cell is required, for Hydrogen (mixtures) APRH cell is required.
Inlet Pressure:	50 - 3000 psig (3.4 – 207 barg).
Operating (Ambient) Conditions:	-20°C to +60°C (-4°F to +140°F), maximum 80% RH non-condensing
Flow Rate:	Cell: 100 sccm Bypass 1000 sccm
Display unit options:	ppmV, ppmW, °C or °F dewpoint
Gas Connections:	Inlet: 1/8” compression, Outlet: 1/8” compression. Bypass outlet 1/8” compression
Signal Output:	0-1 VDC output into 2k ohms or greater RS - 232 Communications – Optional
Electrical:	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)
User Interface:	3-key Membrane Keypad. 2-line1 line, 16-character alphanumeric LCD with 3/8” high digits
Weight:	17 lbs. (7.7 kg)
Dimensions (H x W x D):	12” (30.5cm) x 8 3/4” (22.2cm) x 6 1/4” (15.9cm)

Service with a Big Smile 😊: The **WaterBoy 2+** 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.