PPMa PhyMetrix Portable Moisture Analyzer



Leading edge Nanosensor Technology





more FEATURES

- -110°C to +20°C dewpoint Sensor
- Fast, Accurate and Repeatable
- Built-in temperature compensation
- Small & Lightweight
- State-of-the-art electronics & software
- Advanced User-friendly Graphical Interface
- Programmable data logging
- Battery backed clock calendar
- Built-in Sensor desiccant store for rapid results
- 316 Stainless Steel & PTFE wetted parts
- 1/8" Swagelok[®] compression fittings
- NIST calibrations
- optional 4/20 mA output
- Virtual Analyzer PC training & demo software



PhyMetrix, Inc.

Moisture Measurement Innovation at work

APPLICATIONS

- Petrochemical
- Industrial Gases
- Natural Gas
- Power Generation
- Furnace Gas / Heat Treating
- Air Dryers
- Pharmaceutical
- Aerospace
- Medical
- Test
- Measure
- Calibrate
- Quick
- Reproducible
- NIST Traceable



Proudly Designed, Developed and Manufactured in the USA

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PPMa PhyMetrix Portable Moisture Analyzer





(flow control orifice built into one of the SAE adapters) Exhaust pigtail - Hanging hook and magnet

High Pressure Option upto 500 PSIA (34.5 Bar)

Analog Output 4/20 mA with HART® option

Intrinsically Safe ATEX option

Pressure sensor option 0-150 psia w/automatic pressure correction

| Retractable Sensor | recessed hook and magnet | display display battery battery temperature sensor pressure pressure | |
|--|--|---|--|
| | Moisture Sensor | Range: -110°C to +20°C dewpoint (-166°F to +68°F dewpoint) | |
| | | Accuracy: ±2°C temperature corrected Repeatability: 0.8°C | |
| | - | Response time: 95% of step change in 3 min. Sample flow: >1 LPM | |
| | Temperature | Range: -40°C to +70°C | |
| | Sensors | Accuracy: ±2°C | |
| | Pressure Sensor | 2 to 150 PSIA ±1%, 316L stainless steel wetted parts; higher pressures can be ordered optionally | |
| | Ergonomics | Comfortable to hold in hand, contoured body design, lightweight 1.75 Lbs | |
| | | Hook and magnet for easy temporary field securing / mounting Easy to read graphic LCD display with user controlled backlight brightness (LCD is readable without the backlight) | |
| | | Snap dome tactile membrane switches with dynamically assigned legends | |
| | | Audible feedback upon button press as well as for warnings and alarms | |
| S | | Auto scaling graph / histogram on moisture measurement display for stability verification | |
| | | • Easy to use with verbose built-in context sensitive Help screens | |
| 0 | | Battery Saver, with user selectable Auto-power-down times, can also be disabled | |
| t: | | • Built-in pressure measurement and pressure corrected moisture readings, simultaneously displayed with the uncorrected reading for | |
| g | | greater ease of understanding | |
| .0 | | Verbose Status bar with indications, warnings and audible errors | |
| ÷ | | User selectable locking with or without a password. | |
| Ū | | Built-in battery backed clock calendar | |
| Ð | Electrical | External AC Universal Power adapter (100-240VAC 50-60Hz) with USB connector | |
| Q | | Rechargeable Li-Ion battery, recharges through the USB connector from the PC or from the supplied universal power adapter. | |
| S | | Fully charged continuous operation: ~100 hrs with backlight OFF, ~25 hrs with backlight at 100%, and in between with backlight dimmed. Sampling system and sensor are isolated from electrical interface and supply grounds | |
| | | Measurement resolution of moisture sensor: 1pF resulting in less than 0.01°C | |
| | | External power and I/O: USB mini B female connector - IP67 / IP68 with Sealing Cap | |
| | Mechanical | 1/8" Swagelok® Inlet and Outlet fitting adapters for the SAE/MS 5/16-24 ports. | |
| | Mechanical | Inlet adapter has a built-in flow control orifice, eliminating pressure regulators while maintaining sufficient but not excessive flows. | |
| | | All 316 Stainless Steel and PTFE wetted parts, small surface area stainless steel sampling chamber for fast response time. | |
| | | Integral Sensor retraction into desiccant storage chamber for fast response-time when measuring low moisture | |
| щщ | | Enclosure | |
| and the second s | | Impact resistant (>7 Nm to EN 50014) Polyamide 12, | |
| 13 | | IP65/EN 60529 ATEX hazardous area use (Ex II 2 G) approved (PTB 02 ATEX 1076U), | |
| 'Ma Technical Specifications | | Flammability: UL 94 HB | |
| Д_ | | Abrasion resistant Polycarbonate display lens | |
| Δ | | Dimensions- L: 7.36" (187mm) W: 4.17" (106mm) H: 1.97" (50mm) | |
| | | Weight Total: 1.75 Lbs (0.8 Kg) Pressure: 150 PSIA (10.3 Bar) Available with High Pressure Option 500 PSIA (34.5 Bar) | |
| | Temperature | $\frac{PPMa \text{ Analyzer: -20°C to +60°C}}{Electronics: -40°C to +85°C}$ | |
| | Range | Moisture Sensor: -20°C to +60°C Pressure Sensor: -20°C to +85°C | |
| | | LCD operating: -20°C to +70°C storage: -30°C to +80°C Enclosure: -40°C to +60°C | |
| | Miscellaneous | NIST traceable calibrations | |
| | Features | Units of measure: °C & °F dewpoint, ppmV, ppmW, μB H ₂ O vapor pressure, | |
| | | grams of H_2O / m^3 and Lbs $H_2O / 10^6$ standard cubic feet in Natural Gas. (All units autoscaled) | |
| | | Digital & Analog I/O: USB, 4/20mA with HART® | |
| | | Data logging - single point, multipoint, time stamping, each sample records: dewpoint, temperature and pressure, (memory > 4,000 samples) | |
| | Virtual Analyzer PC software for training and evaluation, allows user to experience the exact interface on their own PC with voice explanations. | | |
| | ORDERIN | NG INFORMATION Part Number Represented by: | |
| Phyl | Metrix Portable Moi | isture Analyzer Model: PPMa PPMa | |
| Included Accessories: USB cable (mini B male to A male) | | | |
| | AC universal power adapter with USB connector two (2) 1/8" tube to SAE/MS 5/16-24 Swagelok® adapters | | |
| (flow | (flow control orifice built into one of the SAE adapters) | | |

Ordering example: part number for the Analyzer with a Pressure Sensor and 4/20mA would be: PPMa-P-A

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