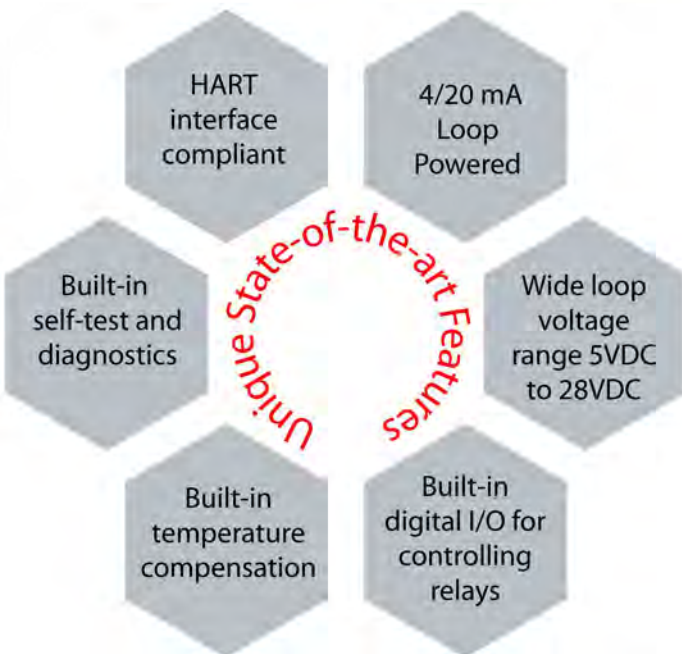


## Leading edge Nanosensor Technology



### more FEATURES

- -110°C to +20°C dewpoint Sensor
- Fast, Accurate and Repeatable
- Small & Lightweight
- State-of-the-art electronics & software
- 316 Stainless Steel & PTFE wetted parts
- NIST calibrations
- Stainless Steel IP68 housing
- Protection from reversed polarity
- Robust Industrial M12 connector, IP68 protection
- 3/4"-16 process interface threads with Viton O-ring
- Interfaces to a variety of panel meters
- Molded IP67 cables available for harsh environment
- Units of measure °C & °F dewpoint, ppmV, ppmW,  $\mu\text{B H}_2\text{O}$  vapor pressure, grams of  $\text{H}_2\text{O} / \text{m}^3$ , Lbs  $\text{H}_2\text{O} / 10^6$  standard cubic feet in Natural Gas.

### APPLICATIONS

- Petrochemical
- Industrial Gases
- Natural Gas
- Power Generation
- Furnace Gas / Heat Treating
- Air Dryers
- Pharmaceutical
- Aerospace
- Medical



**PhyMetrix, Inc.**  
Moisture Measurement  
Innovation at work

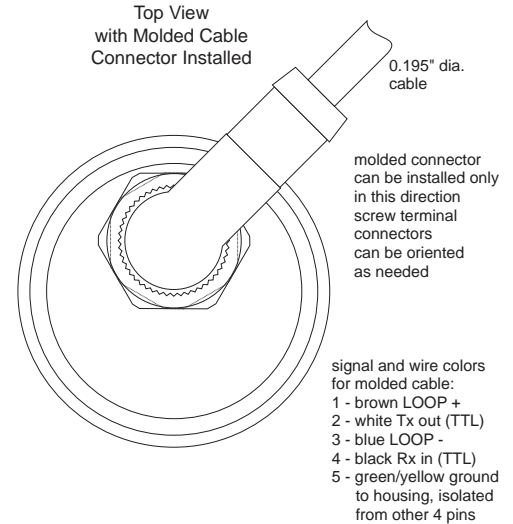
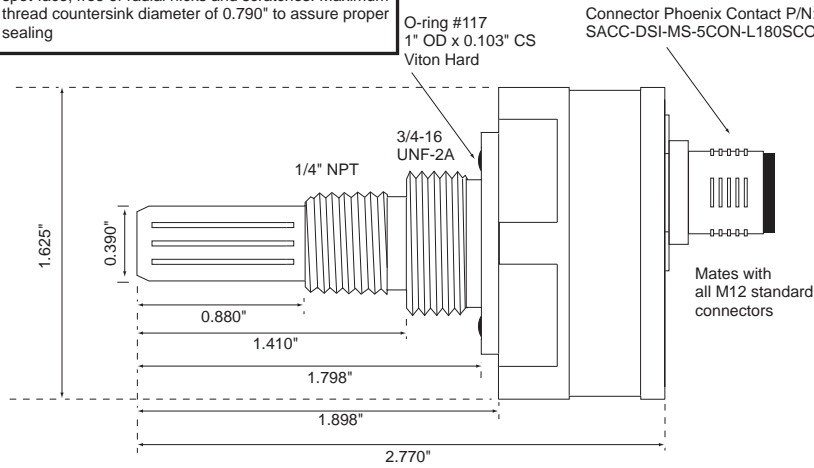
- ◆ Test
- ◆ Measure
- ◆ Calibrate
- ◆ Quick
- ◆ Reproducible
- ◆ NIST Traceable

# PLMa PhyMetrix Loop-powered Moisture Analyzer



## Mechanical

Note: Sample Cell, Manifold or other Mating Surface used with the 3/4"-16 threads must have a sealing surface orthogonal to threads with a minimum of 1" dia. spot-face, free of radial nicks and scratches. Maximum thread countersink diameter of 0.790" to assure proper sealing



## PLMa Technical Specifications

Moisture Sensor	Range: -110°C to +20°C dewpoint ( -166°F to +68°F dewpoint ) Accuracy: ±2°C temperature corrected Response time: 95% of step change in 3 min.	Repeatability: 0.8°C Sample flow: >1 LPM
Temperature Sensor	Range: -40°C to +70°C Accuracy: ±2°C	
Ergonomics	Easy and quick installation, no tools required.	
Electrical	5VDC to 28VDC two wire loop operation 4mA to 20mA Housing isolated from 4-20mA Loop Measurement resolution of moisture sensor: 1pF resulting in less than 0.01°C 5 pin M12 industrial connector IP68 when mating connector fully engaged Mating connectors with molded cables approved for Hazardous Location use available Two conductor cable min. 24AWG (for total cable length >1mile min. 20AWG) To meet CE requirements cable must be shielded. Built-in digital I/O for controlling relays	
Mechanical	All 316 Stainless Steel and PTFE wetted parts for fast response time. Enclosure all stainless steel construction IP67 protection when installed Dimensions (overall) including connector- L: 3.25" (82.6mm) Dia: 1.62" (41.3mm) process threads 3/4"-16 and 14mm x 1.25mm, and 1/4"NPT can install with either threads Weight Total: 6 oz (0.17 Kg) Pressure: 5000 PSIA (345 Bar)	
Temperature Range	PLMa Analyzer: -20°C to +60°C	Electronics: -40°C to +85°C      Moisture Sensor: -20°C to +60°C
Miscellaneous Features	NIST traceable calibrations Units of measure: °C & °F dewpoint, ppmV, ppmW, µB H <sub>2</sub> O vapor pressure, grams of H <sub>2</sub> O / m <sup>3</sup> and Lbs H <sub>2</sub> O / 10 <sup>6</sup> standard cubic feet in Natural Gas. (All units autoscaled) Digital & Analog: Two Wire 4/20mA loop with HART® Transmitter stores all HART setup	

ORDERING INFORMATION	Part Number
<b>PhyMetrix Loop-powered Moisture Analyzer</b> Model: <b>PLMa</b> Included Accessories: M12 mating Connector with molded 10 feet (3 meter) cable	<b>PLMa</b>
Intrinsically Safe ATEX option	suffix <b>-I</b>

Represented by:

IMA Ltd,  
Parkwell House, Otley Road,  
Guiseley, West Yorkshire,  
LS20 8BH, England  
Tel: +44(0)1943 878877  
Email: info@ima.co.uk  
Website: www.ima.co.uk

