

**PRODUCT OVERVIEW**

# Dew Point Meters with HTF™ Sensor Technology

Precise measurement for process control



**Reliable Measurement**

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**Fast**

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**Low Maintenance**

- Fastest Aluminum Oxide Sensors using HTF (hyper-thin film) technology
- Ideal for a wide range of analytical and process measurement applications
- Field-proven and cost-effective

**HTF**<sup>®</sup>  
TECHNOLOGY

## LPDT2 – ULTRA-COMPACT Dew Point Transmitter Loop-Powered (two-wire)

- Loop Powered, with 4-20mA analog output
- Data Logging outputs via MODBUS 485
- User Selectable Settings for units of measure
- 3 Field Adjustment options
- NEMA 4 IP66 Housing
- Display unit can be rotated to read upright
- Optional Cl 1 Div 2 area rating (coming soon)
- Integrated HTF Sensor Technology
- Display and no-display version available
- Low-cost and easy maintenance
- Weatherproof NEMA 4X IP66
- Convenient logging feature
- RS-485 Modbus Interface
- Adjustable analog outputs
- Very low drift
- Long sensor life



### Applications

- Glove boxes
- Clean room environments
- Natural gas transmission
- Hydrocarbon processing
- Air dryers and compressors
- Specialty air gases
- Cryogenic
- Air generators

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## Model LPDT – 2 Wire Transmitter with Display – Smallest Loop Powered Dew Point Transmitter on the Market!

- Spot checking
- Harmonizing and verifying
- Electrical insulating gases
- SF6 moisture measurement
- Natural gas pipelines
- Cryogenic gas producers
- Specialty gas producers
- Welding and joining gas measurement

### Applications

- Monitoring and control of air dryers
- Plastic dryers
- Glove boxes
- Welding gases
- Clean room environments



## Model XPDM – Portable Battery-Operated Compact Dew Point Meter

- HTF (hyper-thin film) technology
- Compatible with a wide range of gases and fits wide range of applications
- Easy to use and maintain
- Field accessible calibration
- Good companion to the Model XDT
- Highly configurable user settings
- Measurement range: -100°C to +20°C at ideal pressure
- Portable battery operated, hand-held

### Applications

- Spot checking
- Harmonizing and verifying
- Electrical insulating gases
- SF6 moisture measurement
- Natural gas pipelines
- Cryogenic gas producers
- Specialty gas producers
- Welding and joining gas measurement

**HTF**  
TECHNOLOGY



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## Model XDT Dew Point Transmitter with Display – The Best "Go To Option" for an Aluminum Oxide Sensor

- HTF (hyper-thin film) technology
- Compatible with a wide range of gases and fits wide range of application
- Field accessible calibration
- Field replaceable sensor
- Highly configurable user settings
- Measurement range: -100°C to +20°C at ideal pressure
- Minimal downtime and low cost of ownership

### Applications

- Dryers
- Welding and laser gases
- Clean rooms
- Feedstock gases
- Industrial gases
- Transformers and switch gear
- Semiconductor



## Model HDT – 2 Wire Transmitter - Robust Loop Powered Dew Point Meter for Gas and Liquid Hydrocarbon Phase Measurements

- HTF (hyper-thin film) technology
- Compact design
- Fast, accurate, reliable
- Programmable alarm signal
- Suitable for pressure or ambient environments
- Temperature compensated calibration
- Waterproof

### Applications

- Hydrocarbon processing
- Pure gases in air separation units (ASU) for N<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>, He
- Natural gas
- Compressed air – instrument air
- Monitoring and control of air dryers
- Industrial gases (welding gases)
- Glove boxes / clean rooms
- Agriculture / food processing
- Semiconductor
- OEM equipment manufacturers



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## Extractive Sample Systems – Turnkey Integrated Solution for Dew Point Measurement

- HTF (hyper-thin film) technology
- Customizable modular design
- Low installation cost
- Preconfigured application-specific systems
- Reduces project complexity and timeline
- Stable, reliable, and cost-effective measurement solution for integrated field calibration and validation capabilities
- Configurable with all dew point meters explosion proof options



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## Mission-Critical Model ESS-SCVP Self Calibrating System

- HTF (hyper-thin film) technology
- Fully automatic self-calibration dew point system
- Integrated field calibration and validation capabilities
- Integrated XDT dew point meter
- Low installation cost and low maintenance
- NIST traceability
- Stable, reliable, and cost-effective measurement solution



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## Hyper-Thin Film Technology

The breakthrough Hyper-Thin Film (HTF) Technology is based on major advances in thin-film technology and metal oxide sciences. It provides measurements with a sensitivity several orders of magnitude larger than of those made with all other technologies. HTF sensors are free of drift and insensitive to temperature changes. The benefit of high wet to dry capacitance ratio is that drift in capacitance due to undesirable factors is less significant. This is clearly a benefit with HTF vs. conventional sensor comparisons of temperature sensitivity and aging drift. The sharp transition from aluminum to aluminum oxide also reduces metal migration, one of the major causes of aging drift in conventional sensors. Across most of their range, our HTF aluminum oxide sensors are completely temperature stable. They can be freely exchangeable in the field with only minor adjustments required at the very extreme ends of the measurement range.

## GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights manufactures and delivers premium sensors, monitors, detectors, analyzers, instrumentation, and software that are mission-critical to keep your operations, personnel, and the environment safe – every day across the globe.

Get the most reliable, precision analytical technologies available on the market today. We will work to match your needs and budget, and provide the optimal, and most stable process analysis solution for your application.

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## CENTERS OF EXCELLENCE | PROVIDING PROVEN SOLUTIONS

Process Insights is committed to solving our customers' most complex analytical, process, and measurement challenges everyday.

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REVOLUTIONIZING MEASUREMENT

**EVERYWHERE**