Overview Brochure 2016

Comprehensive range of instrumentation for the measurement of moisture and oxygen
Relative Humidity Probes and Transmitters

Repeatable RH and temperature measurement for precise humidity control

**PCMini52**
Compact relative humidity and temperature sensor.
- Cost effective
- Accuracy ±2% RH
- ±1% RH stability per year
- Optional stainless steel body construction
- 12mm diameter

**HygroSmart HS3 Probe**
An accurate, stable and user configurable probe designed to provide reliable humidity measurement for process control in a wide range of applications.
- Advanced digital relative humidity and temperature probe
- Interchangeable sensor for easy maintenance
- Accuracy ±0.8% RH
- Tough 145 psig pressure rating

**HygroSmart XP Transmitters (280/290 series)**
Digital relative humidity & temperature transmitter.
- Advanced humidity and temperature transmitters with interchangeable sensor for easy maintenance.
- Wall mount, duct-mount and remote configurations available
- ±1.25%RH accuracy
- Available with calculated absolute humidity, dew-point, frost point, mixing ratio or specific enthalpy output

**SF52 Dew-Point Transmitter**
A dew-point transmitter is designed for use in harsh industrial dryer applications where reliability and toughness are required at an economical cost.
- Ideal for OEM dryer use
- Rugged IP65 construction
- Accuracy ±2°C (±3.6°F)
Dew Point Transmitters

Reliable moisture measurement for critical process control

Easidew Moisture Transmitters
• Simple to use transmitter for continuous measurements of water dew point in compressed air or process gas
• Measurement range -100 to +20 °C dew point (-148 to +68°F)
• Intrinsically safe version and optional display available

Pura Pure Gas Trace Moisture Hygrometer
• A self-contained hygrometer designed specifically to measure trace moisture in high purity gases
• Measurement range -120 to -40°Cdp (-184°F to -40°Fdp)
• Two-wire, three-wire and hazardous area configurations available.
• Configurable for customer requirements.

Easidew PRO XP Explosion-Proof Moisture Transmitter
• Suitable for natural gas, petrochemical and refinery applications
• Measurement range -110 up to +20°Cdp (-166 up to +68°Fdp)
• ATEX, IECEx, cCSAUS, FM, TC TR Ex certified
• Accuracy ±1°Cdp

ES20 Compact Sampling Systems
• Easy to install: fully configured for moisture in gas or liquid measurements
• Safe or hazardous area designs
• Sample filtration, pressure and flow control
• Systems up to 1000 psig inlet pressure as standard

www.michell.com
Tel 978 484 0005
Portable Hygrometers

Fast, accurate and stable moisture measurements in demanding industrial environments

**Easidew Portable Hygrometer**
- Cost-effective portable hygrometer with integrated sampling system
- Measurements down to -100°Cdp (-148°Fdp)
- Long-lasting battery

**MDM50 Portable Hygrometer**
- Compact and easy to use portable hygrometer with integrated sampling system
- Rapid spot-check measurements to -50°Cdp (-58°Fdp)
- Up to 16 hours of operation between charges

**MDM300 Advanced Dew-Point Hygrometer**
- High-speed portable hygrometer for rapid spot-checks in compressed air
- Battery gives 48 hours of typical use between charges
- Ergonomically designed and weighing less than 3 lbs
- Built in data-logging

**MDM300 I.S. Dew-Point Hygrometer for Hazardous Areas**
- Fast dew point measurements in natural gas processing and pipelines
- Global intrinsically safe certification
- Easy to use with application kits and sampling options
Process Analyzers

Moisture and Hydrocarbon Dew Point Measurements

Moisture in Gases

QMA401
Precision moisture measurements from 0.1 to 2000 ppmV.

QMA601
The latest generation of quartz crystal microbalance technology for fast, high-precision moisture measurements. Maintenance-free for three years, and full hazardous area certification.

TDL600
Using Michell's advanced Tunable Diode Laser Spectroscopy sensor for automatic online measurements of moisture in variable compositions of natural gas and bio methane.

Moisture in Liquids

Liquidew EEExd
On-line measurements of trace moisture dissolved in process liquids. Fully hazardous-area certified.

Condumax II
Automatic, on-line measurement of hydrocarbon and water dew point in natural gas by using the fundamental chilled mirror principle. Optional water dew-point measurement channel.

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Chilled Mirror Hygrometers

Precision instruments for critical measurement and control applications

Optidew Range:
Optidew & Optidew Vision

- Cost-effective chilled mirror hygrometers for industrial applications
- Wall-mount and bench-top options
- Measurement range between -40 to +90°Cdp (-40 to +194°Fdp)

S8000 Range:
S8000RS, S8000 Remote, S8000 Intergale

- Michell’s premium range of chilled mirror reference hygrometers
- Accurate measurements of dew-point, relative humidity and temperature – accurate to ±0.1°C (±0.18°F)
- Precision measurement to -90°C (-130°F) dew point (100 ppb) with no need for bulky external cooling (S8000RS)
Calibration Systems

Michell Instruments has over 40 years’ experience manufacturing dew point and humidity calibration instrumentation.

HygroCal 100 Humidity Validator

- Automated validation procedures for complete hands-off probe verification
- Truly portable at 3.2kg, and completely self-contained
- Optional chilled mirror reference hygrometer, allowing use as a calibrator

OptiCal Humidity Calibrator

- Simple operation and maintenance
- Built in precision chilled mirror reference instrument
- Manual control or optional straightforward automated set point programming

Dew Point Calibration System

- Complete dew-point calibration solution with optional compressor, dryer, dew-point generator, reference instrument and optional manifold
- Generated output responds quickly to a change of set point
- Stable humidity generation
- Simple operation through push-button switching of set points or manual flow mixing
- Remote control via digital comms (dependent on model)
Oxygen and Binary Gas Analyzers

Analyzers for critical process control of oxygen and other gases.

XGA301 Industrial Gas Analyzer

- Sensor choices from zirconia, galvanic electrochemical, infrared and ceramic impedance technologies
- Intuitive HMI with back-lit display
- Software package includes live graphing and Excel™ compatible data-logging

XZR400 Series Oxygen Analyzers

- Fast responding MSRS zirconia sensor does not require reference air
- Simple and easy operation
- Low maintenance and cost of ownership

XZR500 Combustion Control Analyzer

- Innovative, metallic sealed reference sensor provides reliable and repeatable measurements with low maintenance
- Simple air calibration reduces cost of ownership
- Flexible installation reduces retrofitting and start-up costs

XTP601 Thermo-paramagnetic Oxygen Analyzer for Safe and Hazardous Areas

XTC601 Thermal Conductivity Analyzer Binary Gas Analyzer

- Non-depleting technologies ensure low cost of ownership and minimal maintenance
- ATEX, IECEx, cCSAus, TC, TR & Ex hazardous area certified
- Touch-screen display allows calibration or adjustment without the need for a hot works permit

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Issue No: Overview Brochure_97521_V1_0516