PST
PROCESS SENSING
TECHNOLOGIES

Moisture Contamination Monitoring in Compressed Air

For safety, quality and efficiency

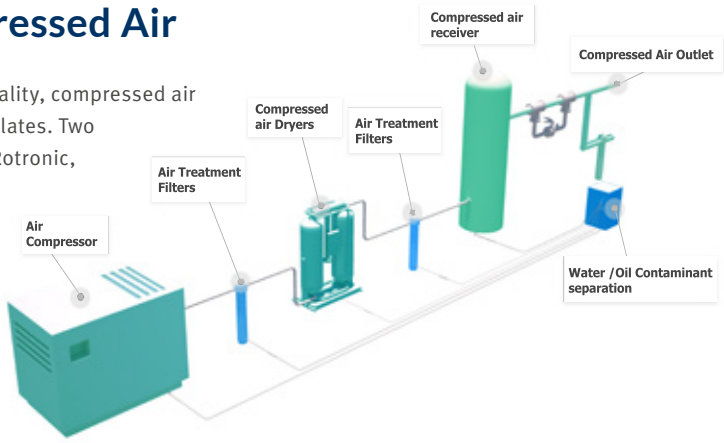
MICHELL Instruments
Analytical Industries Inc
rotronic MEASUREMENT SOLUTIONS
LDetek
DYNAMENT INFRARED GAS SENSORS
NTRON Gas Measurement
SST

Dew-Point Measurements in Compressed Air

To meet the international ISO 8573-1 standard for compressed air quality, compressed air needs to be dried and filtered to remove excess moisture and particulates. Two Process Sensing Technologies companies, Michell Instruments and Rotronic, offer specialised products to control and monitor the quality of compressed air.

These include:

- Dew-point transmitters for ISO 8573-1, Class 1 to 6 dryers
- Cloud-based continuous monitoring system for compressed air
- Portable hygrometers for spot checks of compressed air
- Dew-point sampling system accessories



Applications

- Dew point dependent switching to control dryers
- Safety and quality of breathing air
- Multiparameter cloud-based data logging of compressed air systems
- Monitoring dew point of compressed air in hazardous area applications

Measurement Types

- Dew point
- Trace moisture content (ppmv)
- Temperature
- Relative humidity
- RMS Cloud-based Continuous Monitoring System – allows for on-line measurement of parameters such as pressure, particulates, temperature, moisture and many more

Benefits

- 5 Moisture sensing technologies owned by the PST group
- Save money on energy used for dryers
- Meet industry standards for air quality
- Easy to maintain with global service agreements and sensor exchange programme

Online Industrial Dew-Point Measurement

Easidew – Dew-Point Transmitter for Class 1 to 6 Dryers

Class-leading moisture meter to cover all dew point requirements on any industrial dryer application.

- Measurement range: -100 to +20 °C dew point
- Choice of process connections: 5/8" UNF, G1/2"BSP, 3/4"UNF
- 4 to 20 mA & Modbus RTU over RS485 outputs
- Optionally cleaned for oxygen service

One sensor covers all applications

SF82 – Dew-Point Transmitter for Class 2 to 6 Dryers

Fast responding moisture sensor for any industrial dryer application.

- Measurement range: -60 to +60 °C dew point
- Choice of process connections: 5/8" UNF, G1/2"BSP, 3/4"UNF
- 4 to 20 mA & Modbus RTU over RS485 outputs

Designed for use in fast-response moisture applications

SF52 – Dew-Point Transmitter for Class 2 to 6 Dryers

Economical OEM dew-point sensor for tough industrial dryer applications.

- Measurement range -40 to +60 °C dew point
- Rugged IP65 construction
- 3-wire 4 to 20 mA or voltage output

Cost effective, rugged sensor

Rugged and versatile

Easidew PRO I.S. & PRO XP – For Hazardous Areas, for Class 1, 2 & 3 Dryers

Dew-point sensors designed to meet intrinsically safe or explosion proof standards, to reliably and accurately measure moisture in compressed air applications in hazardous areas.

- Measurement range -110 to +20 °C dew point
- Accuracy up to ±1 °C dew point
- 2-wire 4 to 20 mA output
- Global explosion-proof certified

Reliability and repeatability

Dew-Point Online Hygrometers

Complete dew-point hygrometer and sample systems, providing local display with analogue and digital signal re-transmission.

- Compatible with all Michell dew-point transmitters
- 4 to 20 mA & Modbus RTU over RS485 outputs
- Dual relay alarm outputs

Continuous monitoring system

RMS – Compressed Air Monitoring System

Cloud- and server-based monitoring platform for use as a diagnostic tool, alarming system and reporting package for all measured parameters within your compressed air system.

- Compatible with all Michell dew-point sensors
- Compatible with third party sensors (pressure, temperature, airflow…)
- E-Mail, SMS and telephone alarms
- Reporting with charts and statistics
- Access via any web-enabled device

Portable Industrial Dew-Point Measurement

MDM50 – Portable Hygrometer

Self-contained instrument designed for fast spot-checks of dew point. Available with the SF82 sensor for fast moisture response at the key ranges for dryer applications.

- Rapid spot-check measurements to -60 °C dew point
- T63 from -20 to -60 °C in 40 secs
- Easy to use and maintain

Rugged self-contained portable

MDM300 & 300 I.S. – Portable Dew-Point Hygrometers

Fast response and recovery time allows for a greater number of measurements per day than comparable instruments.

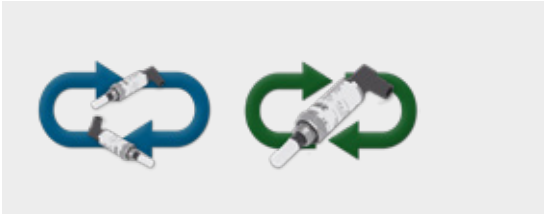
- Wide measurement range: -100 to +20 °C dew point
- Repeatedly fast measurements at low pressure from less than 15 minutes for T95 to -60 °C
- Long battery life: up to 48 hours of typical use between charges

Hazardous area or general purpose

Services

Service Exchange & Recalibration Program

Unique to Michell, this is the quickest and most efficient method of maintaining calibration and one that will avoid any instrument downtime. When calibration is due, Michell will send you a freshly calibrated sensor and then you simply return your old sensor to us within 21 days after making the exchange. Where calibration traceability is required, Michell offers an efficient moisture calibration service at our global service centers.



Oxygen Transmitters and Analyzers for Gas Generators

Ntron SIL O2 Oxygen Analyzer

- Ranged 0 to 25% O_2
- SIL2 rated unit – Analyzer and galvanic isolation barrier in one device

Fail-safe O_2 analyzer

Ntron Senz TX

- Ranges from 0 to 10 ppm up to 0 to 96% O_2
- Flow-through base with optional orifice for easy sampling
- 4–20mA plus RS485 outputs
- 24v DC powered with M12 connector

Plug & Play solution

XTP601 for Oxygen Generators

- Ranges: 20/80/90 to 100% O_2
- +/- 0.2% Accuracy 80 to 100% O_2
- Calibration intervals of up to 6 months
- IEC61508 SIL2 compliant

SIL2 & hazardous areas

Process Sensing Technologies

Process Sensing Technologies (PST) provides an unmatched suite of instruments, analyzers and sensors for precision measurements and monitoring in highly demanding end markets. These range from pharmaceutical/ life sciences, speciality gases, semiconductors, O&G, petrochemicals and power to gas detection, food and beverage and building automation. **Using our products, customers save millions of dollars each year through increased energy efficiency in their processes and reduced process disruptions.** The quality of food, medicines, semi-conductors and thousands of manufactured goods depends on reliable measurements of critical parameters such as humidity, oxygen, CO, N_2, H_2, hydrocarbons, pressure or CO_2 during production, storage and transport. Our products directly improve the profitability of our customers and help them to stay compliant with stringent industry regulations. We own and manufacture the sensing technologies used in the majority of our products. This allows us to remain in a strong leadership position and pass on the benefits of our innovation to our customers.

PST Leading Brands

- **Analytical Industries** – Electrochemical oxygen sensors and gas-analysis
- **Dynament** – Infrared gas sensors
- **LDetek** – Ultra low range online analyser
- **Michell Instruments** – Moisture and oxygen sensing and instrumentation
- **Ntron** – Oxygen sensors and analysers
- **Rotronic** – Humidity and temperature instruments, monitoring systems
- **SST Sensing** – Oxygen sensors and liquid level switches

Group Facts

- Specialised products to control and monitor the quality of compressed air
- 22 Service and sales subsidiaries
- 8 global engineering and manufacturing locations
- 100+ authorized distributors
- 14 proprietary technologies

Humidity *Temperature* *Dew Point* *Water Activity* *Differential Pressure* *Oxygen* *CO_2* *Impurities* *Flammable Gases* *Level*

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