

# DIGITAL DEW POINT METER & DELUXE CONTROLLER

## ATLAS AIR & WATER DDM -76/+68 DIGITAL DEW POINT METER

Our Dew point Meter is a high performance, wide range dew point monitoring instrument for compressed air and other inert gases. It is designed for industrial applications where a rugged, reliable, maintenance-free instrument is required. The Atlas Air & Water Dew point Monitor combines the proven characteristics of long-term stability and rugged design with a far wider operating range. The operating parameters have been expanded to cover applications where measurement of low moisture content is critical to process measurement. This list includes (but is certainly not limited to) industrial and manufacturing processes found in food, metal, paper/wood, pharmaceutical, plastics, oil and gas, petrochem, and other markets.

Long term performance is assured due to the sensor's ability to get completely wet - particularly important in installations that occasionally experience process water spikes due to pipeline condensation, start-up or failure conditions. The sensor is also immune to particulate contamination, oil vapor and most chemicals.

- Our dew point meter has one of the longest calibration intervals available typically two years.
- The DDM-76/+68 uses a patented auto-calibration procedure to detect measurement inaccuracies and automatically make corrections to the calibration curve. Auto-calibration works while the process is running and usually the user will not even realize it has taken place.
- Includes Deluxe Controller (shown below).
- Options to add at additional cost include Flow Meter and/or Standard Flow Control Valve (shown on reverse side).



Atlas Air & Water DDM -76/+68 Digital Dew point Meter (Specs on reverse side)

#### **DELUXE CONTROLLER**

Single loop controller 4-20 mA and output, 4 relays in a UL 508 NEMA 4 enclosure. PFE records up to 12 inputs (4 I/O's standard) every minute with 30 plus days of rolling memory. Example: PFE Deluxe panel with an optional Flow Control Valve will record air pressure, CFM flow with an optional flow meter and dew point with dew point meter every minute for 30 plus days of rolling memory!

The recorded data can be illustrated graphically on PFE panel, out put to thumb drive or exported via Ethernet. The Deluxe panel is programmable allowing for different air pressure discharge settings with an optional Flow Control Valve by day of week or time of day. Thus, if the plant shuts down for a weekend or night shift, and the air compressors remain active, the discharge air pressure for this non-production period will automatically change to a much lower air pressure. This will result in a great reduction of air consumption throughout the plant and typically a 14% savings in energy costs..

Reduced air consumption means reduced compressor KW. Plant air pressure is automatically increased/restored to desired plant operating pressure at desired time and day.



Atlas Air & Water Deluxe Controller (Features on reverse side)

#### **DELUXE CONTROLLER FEATURES**

- Microprocessor with PID control for rapid response and precise control.
- The recorded data can be illustrated graphically on PFE panel, out put to thumb drive or exported via Ethernet.
- PFE records up to 12 inputs (4 I/O's standard) every minute for 30 plus days of rolling memory.
- Deluxe panel is programmable allowing for different discharge pressure settings by day of week or time of day with an optional Flow Control Valve.

#### DIGITAL DEW POINT METER SPECIFICATIONS

Sensor Type: Thin-film Capacitive Polymer

Moisture Probe

Pressure Rating: 300 PSIG standard (Higher pressures available - consult factory)

System Pressure Rating: 300 PSIG (Higher pressures available - consult factory)

Dew/Frost Point Range: -60°C to +20°C (-76°F to +68°F)

Accuracy: ±3°C from -65°C to +20°C

Relay Outputs: (2)\* Form A SPST (0.5a max @ 24VDC/120VAC

The standard model has the "HI set point" (AL1) output wired to the alarm light on the instrument. The "LO set point" (AL2) is wired to terminals in the panel or, if integrated with a dryer demand

system, the LO set point is wired into the PLC of the dryer.

Analog Outputs: (1) 4-20 ma (wired to terminals in the panel)

The analog output is scaled to the range of the instrument.

# ADDITIONAL OPTIONS TO ADD TO YOUR SYSTEM\*

#### FLOW CONTROL VALVE

- Rotary V-ball control valve
- Standard valve controller
- 4-20 mA input/output
- Pressure transducer
- Programming
- 150# RF, 4-20 mA input positioner
- 25' of two wire signal wire
- 508 UL panel
- 3 meters of transducer cable
- Loss of pressure or loss of power result in fail open valve position



### **FLOW METER**

- For each size flow meter you should have a 6-foot straight length of steel pipe of the diameter of the pipe into which the flow meter is installed.
- All flow-meters have a digital readout and have a 4-20ma output.
- All flow meters install easily by drilling two small holes in the pipe line (drill guide included) and clamping the instrument in place.







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products and services!