

# Model 8801T

## Moisture Monitor



- 
- ▶ HART Interface Compliant
  - ▶ 4-20 mA Loop Powered
  - ▶ Wide Loop Voltage Range
  - ▶ Built-In Self-Test and Diagnostics
  - ▶ Built-In Temperature Compensation
  - ▶ Optional: 2-Wire RS-485 MODBUS





# Specifications

<b>Moisture Sensor</b>	Range: Output configured to -100° to 20°C (-166° to 68°F) dewpoint
	Accuracy: ± 2°C temperature corrected
	Repeatability: 0.8°C
	Response Time: 95% of step change in 3 minutes
	Sample Flow: > 1 LPM
<b>Temperature Sensor</b>	-40° to 70°C ± 2°C
<b>Ergonomics</b>	Easy and quick installation, no tools required
<b>Electrical</b>	5 VDC - 28 VDC two wire loop power operation 4-20 mA Housing isolated from 4-20 mA loop Measurement resolution of moisture sensor: 1 pF resulting in less than 0.01°C 5 pin M12 industrial connector IP68 when mating connector fully engaged Two conductor cable min. 24 AWG (for total cable length > 1 mile min. 20 AWG)* Built-in digital I/O for controlling relays Optional 2 wire RS-422/485
<b>Mechanical</b>	All 316 stainless steel and PTFE wetted parts for fast response time Enclosure all stainless steel construction IP67 protection when installed Dimensions (including connector) - 3.25"L x 1.62"Dia, flats for 1.5" wrench Process threads 3/4"-16 and 14mm x 1.25 mm, optionally additional 1/4" NPT can install with either threads Weight: 6 oz (0.17 kg) Pressure: 5,000 psia (345 Bar)
<b>Temperature Range</b>	Analyzer: -20° to 60°C Electronics: -40° to 85°C Moisture Sensor: -20° to 60°C
<b>Miscellaneous Features</b>	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> , Lbs H <sub>2</sub> O/10 <sup>6</sup> standard cubic feet in natural gas Digital & Analog: two wire 4-20mA loop with HART, transmitter stores all HART setup Optional MODBUS: 2 wire RS-485 ASCII and RTU

\* To meet CE requirements, cable must be shielded

## Configurator - 8801T.A (example: 8801T.0)

Option	Description
8801T	8801T Moisture Monitor
<i>A - Sensor Options</i>	
0	Standard dp moisture sensor with Sintered SS shield
S	Solid sensor shield
M	Modbus RS485*
O2	O2 cleaned sensor

\*User must specify ASCII or RTU2

2 additional conductors are added to sensor cable

Not required when panel mount (8801A) or wall mount (8801B) display added.

## Applications

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



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Since then, TAI experienced an merger in 1993 with an aerospace technology leader, Teledyne Brown Engineering out of Huntsville, Alabama, and was briefly known as Teledyne Brown Engineering Analytical Instruments. Early in 1996, the company became a business unit of Teledyne Electronic Technologies, changing the company name to its present designation of Teledyne Analytical Instruments.



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