



# Model DPT 810

Loop Powered Dewpoint Transmitter



## Highlights

- -110°C - +20°C Dewpoint Measurement Range
- 2-wire Loop Powered connection
- IP68 Stainless Steel Housing
- NIST Calibrations
- Fast, Accurate & Repeatable

## Applications

- Petrochemical
- Industrial Gases
- Natural Gas
- Power Generation
- And many more...

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## General Description

### **State of the Art**

The DPT 810 is designed with the best of both worlds; simplicity and functionality. Combining years of expertise, PhyMetrix has incorporated its proprietary NanoPore Structure sensor to develop a transmitter capable of highly accurate and repeatable measurements.

The robust design of the DPT 810 allows for easy installation and integration with current systems mechanically or electrically. Servicing is also minimal due to the ruggedness and simplicity of the sensor. The required periodic calibration to maintain your traceability is a one step process via our knowledgeable staff.

### **The NanoTechnology Sensor**

The PhyMetrix moisture analyzers utilize a proprietary Nanotechnology based metal oxide sensor. The NanoPore structure allows for a quick response on wetting-up and drying-down, high accuracy and reproducibility.

Nanoscience by its very nature allows us to bring change in the critical properties of materials and thus add a new dimension to their applications. Consequently, our technology allows accurate, reproducible and quick measurements in the range of -110°C to 20°C dewpoint.

### **Simple Operation**

DPT 810 is easy to install and operate. Drawing its power from a standard 12-28VDC source, it outputs a stable and linear 4-20mA signal. Within the 4-20mA signal, its range can be custom adjusted to represent any section of the -110°C to 20°C giving the readings greater sensitivity. Once connected, the analyzer can make measurements right away! No further calibration is required!

As the DPT-810 can be dropped directly into your flowing pipe, there is no need to retrieve samples or indirect measuring. This advantage will allow the DPT-810 to continuously monitor the flow conditions with accurate and responsive measurements.

### **Rugged and Robust**

The DPT 810 is constructed with 316 grade stainless steel. Sensor materials have been designed to resist common contaminants such as Glycol, Ethanol, NGL and H<sub>2</sub>S, passing our rigorous 3 point inspection guaranteeing quality engineering. This rugged construction makes it perfectly suited for industrial applications while. With industry standard ¾-16 UNF mounting port, attaches directly to your pipeline and installation is complete.

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## Technical Specifications

Performance		Operating Conditions	
Measurement (DP)	-110°C~+20°C	Operating Humidity	0-85% (Non-Condensing)
Accuracy	+/- 2°C	Operating Temp.	-20°C - 60°C
Response Time	3min (95% Change)	Operating Pressure	Up to 5000PSIA
Repeatability	0.8°C	Flow Rate	>1 LPM
Electrical Specifications		Mechanical Specifications	
Output Signal	4-20mA (2 wire Connection)	Protection	Stainless Steel Cover, IP67
Resolution	1pF (equivalent 0.01C)	Mounting	¾"-16 UNF
Supply Voltage	20-28VDC	Dimensions	138.4mm X 30mm
		Weight	170g

