

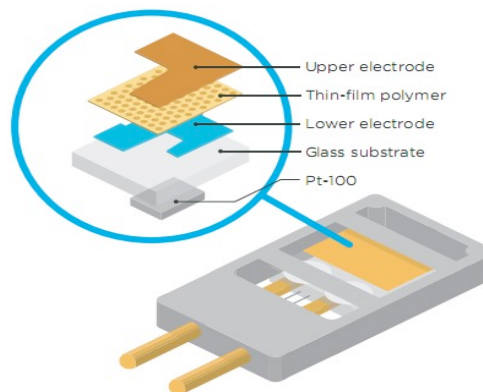
CI-PC36 Process Dew Point Analyzer

Technical Specifications

Accuracy:	<±2°C
Measure Range:	-80°C~+20°C; -60°C~+20°C; (Expand type: -100~+20°C)
Principle:	Polymer Capacitive Type;
Application:	Trace moisture analysis in inert gases, mixed gases, gas streams, etc.;
Approvals:	ISO9001:2008;
Area Classification:	General purpose;
Alarms:	2 adjustable form C relay contacts non-latching;
Calibration:	2 years each time;
Compensation:	Barometric pressure and temperature; optional heated sample system and sensor housing;
Connections:	1/4" or 1/8" compression tube fittings;
Controls:	Menu driven calibration, alarm and system functions;
Data Acquisition:	Selectable data point intervals;
Display:	Graphical LCD 128×64MM; resolution 0.1°C. Both ppm and °C display;
Enclosure:	Painted aluminum 144(H)×144(W)×295MM(D);
Flow Sensitivity:	3~5L/min recommended;
Pressure:	Inlet - regulate to 0.05MPa~0.5MPa, Vent – atmospheric;
Power:	Universal; 170~264 VAC;
Sample System:	Flow control; flow indicator;
Sensor Life:	> 3 years;
Signal Output:	4-20mA isolated;
Temp. Range:	0~50 °C ;
Warranty:	12 months analyzer; 12 months sensor;



Advanced Sensor Technology



A capacitive humidity sensor works like a plate capacitor. The lower electrode is deposited on a carrier substrate, often a ceramic material. A thin polymer hygroscopic layer acts as the dielectric, and on top of this is the upper plate, which acts as the second electrode but which also allows water vapour to pass through it, into the polymer. The water vapour molecules enter or leave the hygroscopic polymer until the water vapour content is in equilibrium with the ambient air or gas. The dielectric strength of the polymer is proportional to the water vapour content. In turn the dielectric strength affects the capacitance, which is measured and processed to give a relative humidity measurement. By also measuring temperature a dew point or absolute humidity value can also be obtained.

Standard Features

- Advanced membrane capacity principle;
- Calibration interval of two years;
- Dew point measure range $-80^{\circ}\text{C}\sim+20^{\circ}\text{C}$;
- Accuracy $\pm 2^{\circ}\text{C}$;
- Withstands condensation;
- Fast response time;
- Easy servicing and data transfer via the RS232 or RS485 (optional) user interface;
- ISO 9001 QA System.

Applications

Dew point detection in:

- Industrial Specialty Gases;
- Heat Treating Furnaces;
- Air Dryers;
- Plastics Manufacturing;
- Chemical Manufacturing;
- Metallurgy;
- Compressed Air;
- Inert Atmosphere Blanketing;
- Li Battery Manufacturing.

Etc.