



Transmet Dewpoint Transmitter

This economical dew-point transmitter is a rugged, self-contained instrument for wide-range measurement of the dew point of air and process gases

- Easy to install
- High stability and repeatability
- Wide dew point range
- Measurement accuracy up to ± 1 °C dew point
- Fast speed of response
- RS232, RS485, 0-20 mA and 4-20 mA linear outputs
- Fully networkable
- Intrinsically safe version available*



Revolutionary Transmitter

Transmet is the leader of a new generation of impedance dew-point transmitters. With a wide operating range from -100 to +20 °C dew point and accuracy of up to 1 °C dew point it is the most complete dew-point transmitter available. Air and process gases at pressures up to 30 MPa can be measured directly. Transmet has a fast response speed that gives the user a continuous measurement in real time. In addition to a standard 4-20 mA output signal, Transmet is also fully networkable, allowing up to 32 measurement points to be monitored simultaneously through its RS485 communication link. Because of Transmet's flexibility it can be configured to satisfy virtually any application.

Simplicity

Transmet measures the gas under test either by direct insertion into the gas line or by diverting a sample of the gas through its (optional) flow-through stainless steel sample housing. Once the required signal output has been selected using the internally selectable switches and Transmet has been connected to the gas sample, power source and monitoring device, it is ready to use. No configuration or calibration is necessary.

Reliability is Vital

A dew-point transmitter must operate reliably over its total operating range, in the user's demanding operational environment. Transmet has been designed to cope with extreme industrial conditions - it is weatherproof to IP65, resistant to shock, vibration and extremes of temperature and operating pressure. Furthermore, the advanced design of the Michell Ceramic Moisture Sensor coupled with extremely competent measurement circuitry give Transmet class leading accuracy, repeatability and measurement range at pressures up to 30 MPa. Its excellent long-term stability gives complete confidence, whatever the process conditions - even in corrosive gases (please consult our Customer Service Department for guidance).

Digital and Analogue Communications

As well as providing both 0-20 mA and 4-20 mA outputs, linear in dew point, Transmet also offers RS232 or RS485 signals for dew-point and sensor temperature. Transmet can therefore be easily interfaced with almost any external monitoring or logging device. Indeed Transmet can be connected directly to the serial port of a PC for data collection and processing using Windows™ Terminal software. With an RS485 network adaptor, data can

* See separate datasheet for details

be logged on Michell's Transmet Logging Software, available as a free download from www.michell.co.uk.

Networking

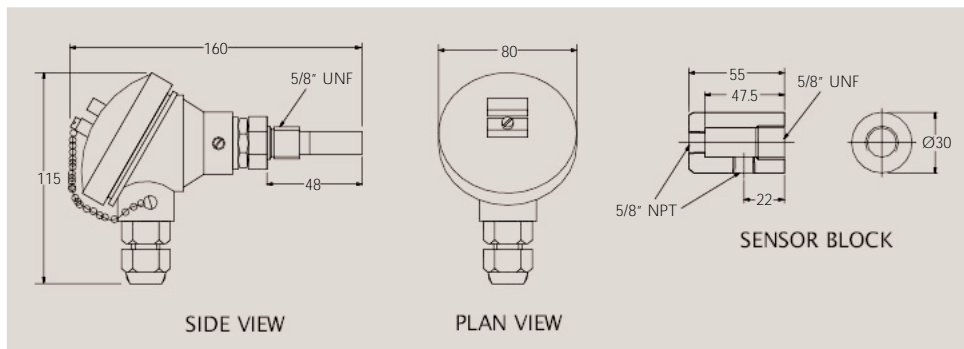
With the optional RS485 Network Converter up to 32 measurement points can be monitored simultaneously using a daisy-chain network system. Michell's logging software allows on-screen monitoring and logging of data from all 32 Transmet instruments and provides scaling, ranging, variable time base and data export to spreadsheets and/or database programs for onward processing. Maximum total network cable length is 1200 metres in RS485 mode.

And More

Transmet can be configured to satisfy virtually any application, either as a 'blind' transmitter; self-contained monitor using a simple display (optional); process controller using a similar display with alarms/outputs, or as a multi-point logger/process control instrument using its networking capability. Transmet can monitor any process from simple compressed air systems to semi-conductor gases. For hazardous area applications an intrinsically safe version can be specified - Transmet IS*.

Technical Specifications

Sensor thread	5/8" UNF parallel	Resolution	0.1 °C from -80 to +20 °C dew point; 1 °C from -100 to -80 °C dew point; 0.1 °C temperature
Case	Cast aluminium, silver acrylic painted	Operating temp	-20 to +60 °C
Ingress protection	IP65	Storage temp	-40 to +70 °C
Power	8 to 28 V regulated or unregulated DC supply. Reverse polarity protected	Operating pressure	From vacuum to 30 MPa
Outputs:	Current source or sink	Flow rate	0-10 Nlmin ⁻¹
Analogue	0-20 mA or 4-20 mA selectable linear corresponding to °C dew point	Gas velocity	20 ms ⁻¹ (max)
Digital	RS232C: 2400 baud, max 5 metres RS485: 1200 baud, max 1200 metres	Optional extras	Sensor sampling block, display unit (Michell DI300 Series), network connector kit, network RS485/RS232C converter, power supply module
Measurement range	-100 to +20 °C dew point; -20 to +40 °C temperature		
Accuracy	±1 °C from +20 to -60 °C dew point; ±2 °C from -60 to -100 °C dew point ±0.3 °C temperature		



Dimensions mm



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Q6284



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