

Easidew TX I.S.

ATEX, FM/CSA Certified Dew-Point Transmitter

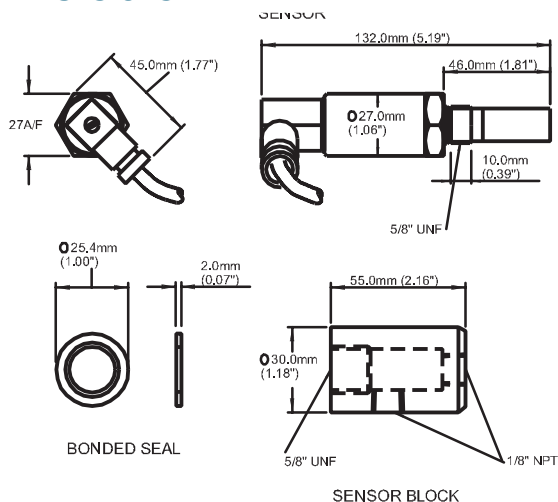


An ATEX, FM/CSA certified, 2-wire, rugged impedance dew-point transmitter for continuous measurement in hazardous area applications.

Highlights

- ATEX FM/CSA certified
- 2-wire loop powered connection
- Dew point or ppm moisture content
- IP66 (NEMA 4)
- Excellent sensor protection
- Wide measurement range, calibrated
-100 to +20°C / -148 to +68°F dew point
- Operating temperature: -40 to +60°C / -40 to +140°F
- Fast response

Dimensions



Technical Specifications

Performance

Measurement range (dew point)	-100 to +20°C (-148 to +68°F) dew point
Accuracy (dew point)	±2°C / ±3.6°F dew point
Response time	5 mins to T95 (dry to wet)
Repeatability	0.5°C / 0.9°F dew point

Electrical output/input

Output signal	4-20 mA (2-wire) current source, configurable over the entire range Dew point -100 to +20°C -148 to +68°F 0 – 3000 ppm _v ppm _v output or non-standard dew-point range must be specified at time of order
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Supply voltage	12–28 VDC
Load resistance	Max 250 Ω @ 12 V / 500 Ω @ 24 V
Current consumption	20 mA max
Supply voltage influence	±0.005% RH/V

Operating conditions

Operating humidity	0–100% RH
Operating temperature	-40 to +60°C (-40 to +140°F)
Operating pressure	45 MPa (450 barg / 6500 psi) max
Flow rate	1 to 5 NI/min (2.1 to 10.6 scfh) mounted in standard sampling block; 0 to 10 m/sec (0 to 32.8 ft/sec) direct insertion
Temperature coefficient	Temperature compensated across operating temperature range

Mechanical specification

Hazardous Area Certificates	ATEX - Ex II 1G EX ia IIC T4 FM - I.S. I 1 ABCD T4 (ta = +60°C) CSA - IS Class 1 Div 1 Groups ABCD T4	
Ingress protection	IP66 in accordance with standard BS EN 60529:1992, and NEMA 4 in protection accordance with standard NEMA 250-2003	
Housing material	Stainless steel	
Dimensions	L=132mm x ø27mm/L=5.19" x ø1.06"	
Filter	HDPE Guard <10 µm 80 µm sintered guard (optional)	
Mounting Thread	5/8" – 18 UNF	
Weight	150g / 5.29oz	
Interchangeability	Fully interchangeable transmitters	
Fault conditions (factory programmed)	Condition	Output
	Sensor fault	23 mA
	Under-range dew point	4 mA
	Over-range dew point	20 mA
Approved galvanic isolators	KFD2-CR-EX1.20200 KFD2-CR-EX1.30200 KFD0-CS-EX1.50P KFD0-CS-EX2.50P KFD2-STC4-EX1.H MTL5041, MTL5040	

Options and accessories

Panel Meter An economical panel or bench-mounted meter with digital display, analog outputs and dual alarm relays. Display and output configurable as dew point (°C or °F) or ppm moisture content.	EA2-OL-100
Easidew Sampler A self-contained sampling system, with filtration and flow control, for measurement of pressure or atmospheric dew point	EA2-SAM
Sample Block Stainless Steel sample block to contain Easidew Transmitter, with 1/8" NPT ports	CSB
Replacement HDPE Guard Pack of 10 HDPE Guards	EA2-HDPE-10
Galvanic Isolator KFDO-CS-ED1.50p galvanic isolator to allow connection of the Easidew TX IS complying with ATEX, FM or CSA regulations	9934042
Sintered Guard Stainless Steel sintered guard, for protection of ceramic sensor (in place of standard HDPE Guard)	9980237
Easidew Communication Kit For connection to Easidew Transmitter and reconfiguration of range and output via Michell Configuration Software (available free of charge from Michell)	EA2-CK

Electrical Connections

4-20mA connections 2-wire	
Pin 1	4-20 mA
Pin 3	POWER

Order codes

2-wire dew-point transmitter



Non-standard range Zero value	W
Non-standard range Full scale values	X
Non-standard range Units (C= °Cdp; F= °Fdp; P= ppm _v)	Y
Pressure other than atmospheric Pressure for ppm _v conversion in barg / psi. Blank= 0 barg / 0 psi	Z

Example:

Standard product: EA2-TX IS

Non-standard products: EA2-TX IS -60 / 20°C
2-wire dew-point transmitter with range -60 to +20°C @ 0 barg
EA2-TX IS -78 / 68°F
2-wire dew-point transmitter with range -78 to +68°F @ 0 barg
EA2-TX IS 0/1000 p2
2-wire dew-point transmitter with range 0-1000 ppm @ 2 barg

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: Easidew TX I.S.97168_V1.1_UK_1010