

ISATEC 5DEW

Trace Oxygen-Dewpoint-Analyzer



AVAILABLE OPTIONS:

- electronical/pneumatic gas supply pump
- electronical flowmeter
- auto-Calibration
- pressure reducer
- particle filter 2-7 μ m
- different housings

ISATEC 5DEW is a compact electronic analyzer to be used to determine the dewpoint of the sample gas.

The measuring principle is based on a metal oxide dewpoint sensor with a multiple structure. The function is based on the adsorption of steam in a porously di-electrical coat. This adsorption coat is situated between two conducting layers on stable ceramic substrate. Due to the very high dielectric constant of water it is possible to reliably register the smallest storage of water. The design of the sensor is very low therefore the sensor responds to the slightest changes in the applied moisture.

It could be equipped with a Zircon dioxide sensor for the measurement of trace oxygen and oxygen concentrations in Percent range.

SENSOR FOR DEWPOINT:



- Dewpoint sensor for very low ranges up to -80°C
- Quick response time
- Precise and long-term stability
- Protection class IP65
- Sensor protection sinter filter 50 μ m stainless steel

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TECHNICAL SPECIFICATIONS

Measuring principle	Dewpoint: ceramic sensor Oxygen: ZrO ₂ probe with Pt-electrodes
Applications	Gases Industries, Chemical Industries, Inert Gas Applications
Measuring range	Dew point: -80°C + 20°C Oxygen: 0...25% Vol. to 0-10 ppmV
Analogue signal port	(0) 4 ... 20mA or 0...10 V, galvanically separated (one for each measuring component)
Reproduceability	± 2% of the measuring value
Resolution	0.1°C for Dewpoint 0,01ppm – C(O ₂) – 0.01% -depending on the O ₂ concentration
T-90 Time	< 40 seconds for Dewpoint < 20 seconds for Oxygen
Display	2* 16 digit, illuminated LCD display 1. Line: Oxygen concentration in ppm or Vol % 2. Line: Dewpoint °C
Messages	1 System message (measuring value yes / no) 1 Message for Oxygen/Dewpoint
Gas connection	inlet/outlet 3/6 mm ferrule pack
Gas sampling	built-in inlet / outlet valve
Sample flow	min. 30 NI/h, max. 50 NI/h
Sample pressure (inlet)	min. 1,1 bar abs., max. 10 bar abs.
Digital communication	serial interface RS232
Ambient operating Temp.	-10°C up to +60°C
Power supply	110 ... 230 VAC or 24 VDC
Protection class/Housing/ Dimensions	IP65 ½ Rack mount 19" if only ISATEC 5DEW Complete rack mount 19" if paired with ISATEC 5100 Trace Oxygen Analyzer
Weight	2,5 kg ... 10 kg depending housing and built-in options