IAS-DPx Series

Portable Measurement Intelligent Analysis

Compressed Air Analysis - Dewpoint



Product Overview

IAS-DPx is a portable dewpoint measurement kit for compressed air systems. It has a built-in large-capacity lithium battery with a standby time of more than a week. Built-in 4G module enables remote monitoring. True wireless solution, set-and-forget installation and setup, plug and play. Just connect the gas through the Φ6 mm quick connector to start measuring

It can integrate a variety of the most advanced humidity sensors: FIXINST-P polymer film capacitive sensor, FIXINST-A ultra-fast response aluminum oxide sensors with innovative moisture sensitive materials and processes, FIXINST-Q ultra-low dewpoint sensitivity dual-resonance QCM sensor. It provides IAS-DPx the ability to accurately measure a wide range of dewpoint from -110 ... +60 °Ctd

MEMS-based pressure sensor can monitor dewpoint and online pressure simultaneously. FixInst's patented sensor materials and processes provide measurements with high sensitivity and ultra-fast response speed. Up to 10+ points of dewpoint calibration and multi-point temperature compensation provide measurement accuracy up to ±2 °Ctd (see technical data sheet). Resistant to condensation, particulate pollution, oil vapor and most chemicals

Product Advantages

Large capacity battery
Super long standby

4G module for
remote monitoring

High accuracy
Ultra-fast response

Easy Installation
Plug and play

Technical Data

Measuring Range

Dewpoint	
IAS-DP01	-60 … +60 °Ctd
IAS-DP02	-80 … +20 °Ctd
IAS-DP03	-110 … +20 °Ctd
Temperature	-40 … +100 °C
Pressure	0 … 1.7 MPa(a) (Option)

Accuracy

Dewpoint (Air or Nitrogen)	
+20 … -60 °Ctd	±2 °Ctd
-60 … -110 °Ctd	±3 °Ctd
Temperature (Customizable)	
0 … +50 °C	±0.3 °C (Standard)
-40 … 0 °C & +50 … +100 °C	±0.5 °C (Standard)
Pressure Accuracy	
Accuracy @23 °C	±0.3 %FS
Pressure Drift With Temperature	±0.001 MPa/10 °C

Response Time

Dewpoint 63% [90%], Reference: 20 °C, 1bar(a), 4L/min	
-50→+20 °Ctd	20 sec [40 sec]
+20→-50 °Ctd	1 min [3 min]
Pressure	< 1 sec

Operating Environment

Battery Box Operating Temperature	-30 … +70 °C
Storage Temperature	-40 … +80 °C
Relative Humidity	0 … 95 %RH
Sample Gas Flow Rate	> 1 L/min
Pressure	0 … 1.7 MPa(a)

Power

Battery Capacity	135 Wh
Charging Battery	100 ~ 240 VAC 50 ~60 Hz

Others

Process Connection	6 mm Stainless steel quick connectors
Sensor Filter	Stainless steel sinter filter (Filtration class 30~45 µm)
EMC	Compliant with IEC 61326-1
Dimension	346 × 221 × 103 mm (L×W×H)
Weight	5.5Kg
Material	PP

Order Information

Model	Description
IAS-DP01	-60 … +60 °Ctd, Compressed Air Audit Suit-Dewpoint, built-in 124 Wh rechargeable battery, built-in 4G-IoT module
IAS-DP02	-80 … +20 °Ctd, Compressed Air Audit Suit-Dewpoint, built-in 124 Wh rechargeable battery, built-in 4G-IoT module
IAS-DP03	-110 … +20 °Ctd, Compressed Air Audit Suit-Dewpoint, built-in 124 Wh rechargeable battery, built-in 4G-IoT module