

F307x Series

-110 ... +60 °Ctd Optional

Dewpoint & Pressure Multi-parameter Portable Monitor



Product Overview

The F307x series dewpoint meter can integrate a variety of the most advanced humidity sensors: polymer film capacitive sensors, ultra-fast response aluminum oxide sensors with innovative moisture sensitive materials and processes, and dual resonance QCM sensors with sensitivity at ultra-low dewpoint. These sensors provide F307x with the ability to accurately measure a wide range of dewpoints from -110 to +60 °Ctd

Revolutionary auto-calibration circuit design automatically compensates for circuit drift caused by temperature, contamination, and aging, providing long-term stability and high accuracy measurements

Innovative temperature compensation algorithm and multi-point temperature compensation calibration, greatly improving the sensor's temperature drift and ensuring high-precision dewpoint measurement over a wide temperature range

Product Advantages



Integrated Display

Display various dewpoint parameters simultaneously



Ultra-wide Range

-110 ... +60 °Ctd
Optional measuring range



Portable Measurement

Portable and easy to install
Simple to operate



Innovative Technology

FixInst patented sensor materials and processes

- Compatible with various sensor technologies: polymer thin film, aluminum oxide, QCM crystal type sensors that can be used in different measuring ranges
- MEMS based pressure sensor for simultaneous monitoring of dewpoint and pressure
- 10+ points of dewpoint calibration and multi-point temperature compensation provide accurate measurements up to ± 2 °Ctd (Refer to "Technical Data")
- Built-in 135 Wh high-capacity lithium battery to avoid interruption of data recording due to accidental power failure
- Ultra-fast response time
- Outstanding long-term stability
- Anti-Condensation, resistant to particulate contamination, oil vapor and most chemicals
- High resistance to electrical disturbance
- 7.0" Touch LCD screen, easy to operate, what you see is what you get
- Easy to install and view data, start measuring by connecting the gas via a 6 mm quick connector

Technical Data

Measuring Range	Display / Data Log
Dewpoint	Display 7.0" Touch LCD screen
F307Ax -60 ... +60 °Ctd	Data Log Max 16G USB Flash Disk
F307Bx -80 ... +20 °Ctd	
F307Cx -110 ... 0 °Ctd	
Temperature -40 ... +100 °C	
Pressure 0 ... 1.7 MPa(a) (Option)	
Accuracy	Power
Dewpoint (Air or Nitrogen)	Power 220 VAC 10 W
+60 ... -60 °Ctd ±2 °Ctd	Battery Capacity 135 Wh
-60 ... -100 °Ctd ±3 °Ctd	Charging Batteries 100 ~ 240 VAC, 50 ~ 60 Hz
Temperature (Customized)	
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	Operating Environment
Dewpoint: 63% [90%], Reference: 20 °C, 1bar(a), 4L/min	Operating Temperature 0 ... +50 °C
-50 → +20 °Ctd 20 sec [40 sec]	Storage Temperature -40 ... +80 °C
+20 → -50 °Ctd 1 min [3 min]	Relative Humidity 0 ... 95 %RH
Pressure < 1 sec	Sample Gas Flow Rate > 1 L/min
	Pressure 0 ... 1.7 MPa(a)
Other	
Process Connection 6 mm Stainless steel quick connector	
Sensor Filter Stainless steel sinter filter (Filtration class 30~45 um)	
EMC Compliant with IEC 61326-1	

Order Information

Model	Description
F303A	Dewpoint monitor -60 ... +60 °Ctd, 7.0" Touch LCD screen, Portable case type
F303A-P	Dewpoint monitor -60 ... +60 °Ctd, 7.0" Touch LCD screen, Portable case type, Integrated pressure sensor, Simultaneous output of pressure dewpoint and atm. dewpoint
F303B	Dewpoint monitor -80 ... +20 °Ctd, 7.0" Touch LCD screen, Portable case type
F303B-P	Dewpoint monitor -80 ... +20 °Ctd, 7.0" Touch LCD screen, Portable case type, Integrated pressure sensor, Simultaneous output of pressure dewpoint and atm. dewpoint
F303C	Dewpoint monitor -110 ... 0 °Ctd, 7.0" Touch LCD screen, Portable case type
F303C-P	Dewpoint monitor -110 ... 0 °Ctd, 7.0" Touch LCD screen, Portable case type, Integrated pressure sensor, Simultaneous output of pressure dewpoint and atm. dewpoint