



GDWS-311CM SF6 Gas Dew Point Tester (Chilled Mirror Method)



General Information

GDWS-311CM is ideal instrument when it is necessary to test water content of SF6 gas. The core component sensor is produced by GE company. With professional hardware chips and excellent software algorithms of STMicroelectronics, we have produced a new generation of gas moisture test instrument.

Application

- Moisture monitoring of SF6 gas electrical equipment for electric power.
- SF6 gas cylinder gas quality test
- High purity gas manufacturing

- Semiconductor industry dry gas supply
- Research and development use
- Clean room/dry house monitoring
- Metal heat treatment site and laboratory industrial gas humidity detection, such as air, CO₂, N₂, H₂, O₂, SF₆, He, Ar and other inert gases.

Features

- Better than $\pm 2^{\circ}\text{C}$ measurement accuracy.
- The whole channel polymer material design, ensures no water wall hanging phenomenon and guarantees the test speed.
- The oil-free stainless steel body regulating valve is used to ensure the accuracy of the measured value.
- Advanced software algorithms improve the test accuracy of sensors.
- Combined chassis configuration solution, users can easily combine related instruments and accessories. The overall package is carried, which makes the user have a more relaxed experience.
- Start up test, no need to preheat and oscillate.
- Temperature conversion and pressure data correction.
- Fuzzy computing technology.
- High-power lithium battery power, realize AC and DC dual power supply. No on-site AC power is required. Lithium battery power supply continues to work for more than 8 hours without the need of an external power supply.
- Anti-electromagnetic interference circuit design to ensure product reliability.
- It can expand USB communication, serial communication, wireless communication module, and realize the communication and printing functions of the upper computer.

- Large-capacity memory, which can realize 1000 sets of data storage functions.
- The gas path pretreatment function can be used to purify the test pipeline before the field test work, which shortens the test time. (optional)
- The instrument has a test gas recovery function to recover the sulfur hexafluoride measurement gas.
- The test data is stable and can provide both standard dew point values and converted dew point values at 20°C.
- The best test flow area shows that the user can adjust the gas flow intuitively and quickly. Reduce test time.
- The air inlet is designed with a miniature self-sealing joint, and the air path to be tested will not leak when the air path is disconnected.

Specification

Measurement method	Chilled Mirror Method
Measurement range	dew point -110°C--+20°C(support ppmv)
Accuracy	±2°C (when the dew point temperature is below 0 °C, the sensor output is the frost point)
Response time	63% [90%] +20→-20°C Td 5s[45s] -20→-60°C Td 10s[240s]
Resolution	0.01°C

Repeatability	$\pm 2\text{ }^{\circ}\text{C}$
Display unit	$^{\circ}\text{C}$, ppm, $^{\circ}\text{CP20}$ (converted value at 20°C)
Gas flow	400-600ml/min
Flow display	0-1000mL digital flowmeter
Sample gas pressure	$\leq 1\text{MPa}$
Power supply	220VAC $\pm 10\%$, 50Hz, AC/DC use, over-charge protection, continuous working is no lower than 8hours.
Use environment temperature	$-20\text{---}+60^{\circ}\text{C}$
Environment humidity	90%RH
Measurement value influence	No affect of pressure and flow
Dimension	395*295*155mm
Weight	about 2kg