



## GDSF-311WPD 3-in-1 SF6 Gas Analyzer



### General Information

GDSF-311WPD is ideal instrument when it is necessary to test water content, purity and decomposition products of SF6 gas. The core component of dew point test is DRYCAP® series sensors produced by Finland Vaisala company. The infrared principle SF6 gas purity testing sensor manufactured by European Sensor Company is used to test the purity of SF6 gas. The electrochemical sensor manufactured by Membrapor in Switzerland is used as the sensing element for the test of SF6 gas decomposition products. With professional hardware chips and excellent software algorithms of STMicroelectronics, we have produced a new generation of 3-in-1 gas analyzer.

## Application

- Analysis of trace moisture, purity and decomposition products of SF6 gas electrical equipment for electric power
- SF6 gas cylinder gas quality test
- Quality test of SF6 gas for recovery and reuse
- 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.

## Specification

### SF6 Humidity

Measurement method	Resistive and Capacitive measurement principle
Measurement range	Dew point -80°C--+20°C(support ppmv)
Accuracy	±1°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	± 0.5 °C
Display unit	°C, ppm, °C P20(converted value at 20°C)
Gas flow	400-600ml/min
Flow display	0-1000mL digital flow meter
Sample gas pressure	≤1MPa

### SF6 Purity

Measurement method	Infrared Measurement Principle (NDIR series sensors)
Measuring range	0 ~ 100% SF6
Response time	[90%] 60s
Accuracy	± 0.5%FS
Repeatability	± 0.5%
Resolution	0.01%
Display unit	%

## SF6 Decomposition Products

Measurement method	Electrochemical Measurements Principle (Electrochemical series sensors)
Measurement range	H2S: 0 ~ 200ppmv SO2: 0 ~ 200ppmv CO: 0 ~ 500ppmv HF: 0 ~ 50ppmv
Accuracy	H2S: <10ppmv $\pm 0.3$ ppmv; >10ppmv $\pm 3\%$ SO2: <10ppmv $\pm 0.3$ PPmv; >10ppmv $\pm 3\%$ CO: <50ppmv $\pm 2$ ppmv; >50ppmv $\pm 4\%$ HF: <10ppmv $\pm 0.3$ ppmv; >10ppmv $\pm 3\%$
Repeatability	H2S: <10ppmv $\pm 0.2$ ppmv; >10ppmv $\pm 2\%$ SO2: <10ppmv $\pm 0.2$ PPmv; >10ppmv $\pm 2\%$ CO: <50ppmv $\pm 2$ ppmv; >50ppmv $\pm 2\%$ HF: <10ppmv $\pm 0.2$ ppmv; >10ppmv $\pm 2\%$
Resolution	0.01ppmv
Display unit	ppmv

## General Parameters

Power supply	220VAC±10%, 50Hz, AC/DC use, over-charge protection, continuous working is no lower than 8hours.
Use environment temperature	-20--+60°C
Environment humidity	90%RH
Measurement value influence	No effect of pressure and flow
Dimension	395*295*155mm
Weight	About 2kg.

## Accessories

Main Tester	1 piece
Adapter	1 set
Teflon pipe (include flow adjustment valve and fast connector)	1 set
Tail pipe	1 set
Spare parts	1 set

Charger	1 piece
User's Guide	1 piece
Test Report	1 piece