

## SF<sub>6</sub> Gas Analyzer

### RA912F with pump-back system



### Application

RA912F portable comprehensive analyzer is applicable for the measurement of purity, moisture, and decomposition products (SO<sub>2</sub>, H<sub>2</sub>S, CO) of SF<sub>6</sub> gas. It is equipped with gas pump-back system, which could refill SF<sub>6</sub> gas back to gas compartments and achieve the zero loss as well as zero emission during the measurement of SF<sub>6</sub> gas. In addition, the device can also recover SF<sub>6</sub> gas to external air bag under normal atmospheric pressure or temporary storage container under high pressure.

### Features

1. 10.4" touch screen; physical key input is available as well.
2. Automatically one-key measurement and lock of measurement data.
3. Recovery and refilling functions; zero emission of SF<sub>6</sub> gas.
4. Expert diagnostic system could judge if measurement data meets the requirement according to selected criteria.
5. Automatic gas flow adjustment.
6. Real-time display of gas dynamic flow.
7. Long life and maintenance-free sensors.
8. Proprietary design enables the repair and replacement of modules.
9. Large capacity storage; data exporting by USB.
10. Large capacity battery and long battery life.
11. Design of trolley case with wheels is convenient to move.
12. Damp-proof, water-proof, shockproof; IP67 protection degree.

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Measuring Parameters

Purity

Measuring Principle	Thermal conductivity
Measuring Range	90%-100%(mass percentage), 65%-100%(volume percentage)
Measuring accuracy	±0.2%(volume percentage)
Repeatability	≤0.1%(RSD)
Respond Time(T <sub>90</sub> )	<60s

Moisture

Measuring Principle	Resistance-capacitance
Measuring Range	-60°C to +20°C
Uncertainty	±2°C
Respond Time	≤3minutes

Decomposition Products

Measuring Principle	Electrochemistry
Measuring Range	SO <sub>2</sub> : 0-100ppm H <sub>2</sub> S: 0-100ppm CO: 0-500ppm
Uncertainty	SO <sub>2</sub> , H <sub>2</sub> S: ±0.5 μL/L(0-10μL/L); ±5 %(10~100μL/L) CO: ±2 μL/L(0~50μL/L); ±4 %(50~500μL/L)
Respond Time	<60s

Recovery and refilling

Refilling Pressure	≤0.8 MPa.a(directly refill to gas compartment)
Recovery Pressure	≤0.8 MPa.a(recover to external cylinder)
Venting Pressure	Atmospheric pressure

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Technical data

Touch Screen	10.4"
Battery	5200 mAh chargeable lion battery
Adapter	Input: (100~240) VAC, 50/60 Hz, 0.5 A
Adapter	Output: 29.4 V 2.00 A, 58.8 W MAX
Power Consumption	50 W
Charging Time	≤ 4 h
Battery Life	Measurement times ≥ 10
Environment Temperature	(-10~40) °C
Environment Humidity	(15~90) %RH
Dimension	560 mm×455 mm×265 mm (L×W×H)
Weight	25kg

Figure 1 Product diagram

