



GDWG-III SF₆ Gas Quantitative Leakage Detector



General introduction

GDWG-III SF₆ gas leakage detector, with non-dispersed infrared (NDIR) technology, is mainly used to pinpoint and measure SF₆ leakage on GIS and refilling equipment within power industry.

The annual leakage rate of SF₆ gas electrical equipment is measured with bandaging method. At the same time, the equipment is widely used in power supply bureau, substations, high voltage switch company, laboratory hood and scientific test.

Application

- High voltage switch-gear
- Helicopter rotor blades
- Gas transmission system
- Fire extinguisher
- Ventilation rate study
- Hazardous material
- Tank

Advantages

- No radioactive risk.
- No need to replace high purity argon gas regularly.
- No need to replace sensor regularly, cost-effective.
- No need to make linear calibration every year, no wearing parts.
- Not effected by humidity, environment pollution or data drift.
- When there is severe leakage or SF₆ gas concentration is up to 100%, it will not be polluted or damaged.

Features

- To measure SF₆ gas leakage qualitatively and quantitatively.
- To locate SF₆ gas leakage point.

- Parameters like SF₆ gas concentration, temperature, humidity, power indicator, date and diaphragm pump status are displayed.
- User-friendly interface.
- Use NDIR technology and advanced sensor from Germany.
- Fast test speed and good repeatability, data is stabilized within 10s.
- With temperature and pressure compensation.
- No false alarm, no gas except SF₆ responses.
- Non-contact gas measurement ensures that sensor won't be poisoned at any concentration rate.
- Thermostatic chamber ensures no temperature drift at ambient temperature for sensor.
- 3.5inch OLED display, legible in the strong sunlight.
- Built-in lithium battery, standby time is long.
- Pipelines is customized as per request.
- Pump suction sampling ensure good sealing of gas path under test.
- More than 100 groups of test data are stored based on gas concentration and test time, easy to query.
- The outer casing is high strength, fully shielded, ultra-lightweight ABS material structure.

Specifications

Measuring principle	Non-dispersive infrared sensor (NDIR)
Measuring range	0-1500ppm SF6
Resolution	0.1ppmv
Accuracy	$\pm 2\%$ FS (0-1000ppm)
Repeat-ability error	$\leq \pm 1\%$
Sensitivity	1ppmv
Response time	≤ 10 s
Recovery time	≤ 15 s
Stability	$\leq \pm 20$ ppm, more than 1000 hours
Sampling mode	Pump suction type, flow up to 1L/min.
Zero drift	$\leq \pm 1\%$ (F.S/year)
Linear error	$\leq \pm 1\%$
Peak current	< 700 mA
Average power	< 2 W
Operation air pressure	800-1150hPa
Environment humidity	0-95%RH

Storage temperature	-20 ~ +60°C
Operation temperature	-20 ~ +50°C
Operation humidity	0-95%(non-condensing)
Working voltage	220VAC±10%,50Hz Or Built-in Li-battery, continuous working 6 hours after full charge.
Dimension	220*250*120mm
Weight	About 2kg

Accessories

Main unit	1 set
Charger	1 piece
Hand-held probe	1 piece
Anti-slip belt	1 piece
Hose 600 mm	1 piece
User's guide	1 copy
Warranty card	1 copy