

SF₆ 6100 Bench Gas Analyser

The Rapidox SF₆ 6100 Bench mountable gas analyser is designed for controlling and monitoring the quality of SF₆ gas within a range of laboratory and field-based applications.



These applications include medical testing, laboratory-based research and development, and the analysis of SF₆ gas present in medium and high voltage gas insulated electrical equipment.

SF₆, SO₂ and H₂O (dew point) gases are simultaneously analysed and data-logged to an exceptionally accurate standard. A gas output nozzle allows for the analyser to be attached to the Rapidox Gas Recovery Bag, ensuring that all sampled SF₆ gas is recovered.

The Rapidox SF₆ 6100 Bench analyser is also available as a complete and portable kit, allowing users to carry all of the equipment that they need within a heavy-duty IP66 case.

Each kit includes a set of DN8 and DN20 fittings with a stainless steel braided hose (self-sealing couplings), a swing handle fitted to the analyser and a separate thermal printer.

Please contact Cambridge Sensotec for further information or to discuss your requirements.



Though highly configurable to suit individual customer requirements, the Rapidox SF₆ 6100 Bench possesses a number of features to enhance functionality.

- Low maintenance sensors
- Easy calibration procedure
- Digital outputs
- Optional variable speed pump
- Fully programmable analogue outputs
- Powerful Rapidox software
- Operates on worldwide mains voltage
- Password protection
- Two fully programmable alarms

SF₆ Gas

SF₆ is an extremely stable, non-flammable and highly electronegative gas with excellent dielectric properties. It is commonly used in medium and high-voltage electrical equipment as an electrical insulator, arc-quenching and cooling medium.

However, SF₆ is classified as a greenhouse gas and must be kept within a closed circuit to avoid any deliberate release into the atmosphere. The international Kyoto agreement protocol has mandated reductions to harmful emissions amongst its member states.

For the power transmission and distribution network, SF₆ technology remains essential. To protect personnel, equipment and the environment regular SF₆ analysis should be adopted within the maintenance schedule. The early identification of any decomposition products and moisture within the SF₆ gas will help avoid unnecessary shutdowns, outages and failures, in addition to reducing maintenance expenditures.

Accessories



- 1 Calibration Kit and Service
- 2 Gas Recovery Bag
- 3 Sampling Kit

Specification

SF ₆ - Sulphur Hexafluoride	0-100%, ±0.5% full-scale accuracy
H ₂ O - Dew Point	-60°C to +20°Cdp, ±2°Cdp accuracy
SO ₂ - Sulphur Dioxide	0-100ppm, ±2% full-scale reading
Ambient Operating Conditions	-10°C to +40°C, 10-90% RH, 800-1100mbara
Warm-up Time	3-4 minutes at 20°C
Response Time	3-5 minutes
Voltage	90-260 VAC, 50/60Hz
Voltage Outputs	0-5V linear, user programmable
Sample Connections	Rectus style closed coupled fitting
Current Outputs	4-20mA linear, user programmable
Digital outputs	RS232 (RS485 option available). Data streamed on demand
Max Inlet Pressure	10 Bar gauge (protected)
Optional Pump	0-1 litres per minute
Calibration	SF ₆ and SO ₂ : User selectable gas values. H ₂ O: Sensor is factory fitted
Display	20 x 4 character (9mm) back-lit LCD
Analyser Dimensions	150mm(H) x 350mm(W) x 263mm(D)
Weight	7kg