

# SF<sub>6</sub> 6100 Bench Gas Analyser

The Rapidox SF<sub>6</sub> 6100 Bench mountable gas analyser is designed for controlling and monitoring the quality of SF<sub>6</sub> gas within a range of laboratory and field-based applications.



These applications include medical testing, laboratory-based research and development, and the analysis of SF<sub>6</sub> gas present in medium and high voltage gas insulated electrical equipment.

SF<sub>6</sub>, SO<sub>2</sub> and H<sub>2</sub>O (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 SF<sub>6</sub> gas is recovered.

The Rapidox SF<sub>6</sub> 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 special tongue and groove self sealing couplings (compatible with famous brands), 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 SF<sub>6</sub> 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

SF<sub>6</sub> 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, SF<sub>6</sub> 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, SF<sub>6</sub> technology remains essential. To protect personnel, equipment and the environment regular SF<sub>6</sub> analysis should be adopted within the maintenance schedule. The early identification of any decomposition products and moisture within the SF<sub>6</sub> gas will help avoid unnecessary shutdowns, outages and failures, in addition to reducing maintenance expenditures.

## Accessories



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

## Specification

|  |  |
|--|--|
| SF <sub>6</sub> - Sulphur Hexafluoride | 0-100%, ±0.5% full-scale accuracy  |
| H <sub>2</sub> O - Dew Point           | -60°C to +20°Cdp, ±2°Cdp accuracy  |
| SO <sub>2</sub> - 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                     | Special tongue and groove self sealing couplings (compatible with famous brands)                             |
| 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 <sub>6</sub> and SO <sub>2</sub> : User selectable gas values. H <sub>2</sub> 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  |