



3-038R-R602V2-B

MultiAnalyser^{SF6} (six-in-one)

For gas quality analysis

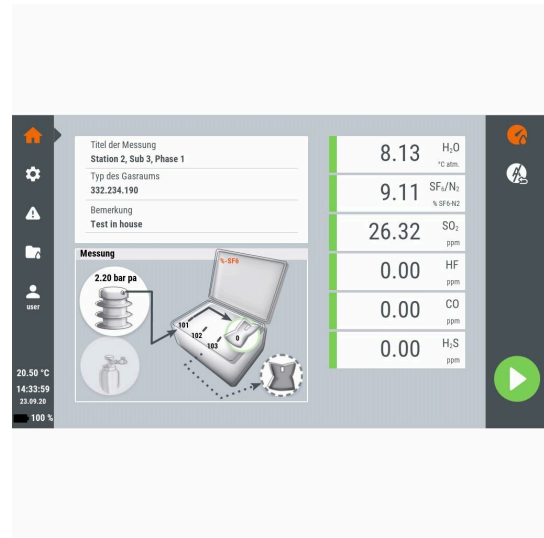
With its innovative equipment, the MultiAnalyser^{SF6} perfectly meets the user's requirements and is ready for operation immediately after switching on. High-quality manufacture and ergonomic design guarantee the quality standards for a compact and maintenance-friendly measuring device with high measuring accuracy. This multi-functional measuring device allows the emission-free determination of up to six measuring parameters with only one sample. Depending on the individual device configuration, values of the integrated sensors can be determined.

Thanks to the easy-to-remove integrated battery, transport regulations are no longer an issue. Our field-replaceable electrochemical sensors offer a great benefit as the device is ready for use immediately after replacement without any down times.

The MultiAnalyser^{SF6} allows different methods of operation for emission-free handling of the measured gas. On the one hand the internal storage of the measured gas into the device, into an external cylinder or an external discharge gas collecting bag; for continuous measurements without pumping the gas back it is recommended to collect the gas in an external discharge gas collecting bag. On the other hand pumping the gas back into an external cylinder, vessel or gas compartment up to 10 bar pe. Furthermore, the external bag can be emptied by using the MultiAnalyser^{SF6}, a DILLO service cart or compressor unit.

The measuring device offers automated operation via a 7" touch screen. It is possible to operate and exchange data by means of mobile end devices such as smartphones, tablets or laptops via WiFi.

Integrated into a trolley, the measuring device can be transported in a safe and comfortable way. Modern control technology in conjunction with a user-friendly interface in several languages make device operation simple and convenient.



Standard version

- battery operation and/or external power supply
- indication of moisture concentration in dew point °C or °F, referred to atmospheric or inlet pressure, reversible to indication in ppm_v, ppm_w
- indication of inlet pressure in bar, psi, MPa and kPa (in p_a or p_e) to be selected on the touch screen
- 6 m long connecting hose with DN8 and DN20 DILO couplings
- 2 m long electrical connecting cable
- USB flash drive with data file for evaluation and reading out of measuring results

Special features

- Gas type: SF₆
- Sensors: percentage in N₂
- Sensors: moisture
- Sensors: SO₂
- Sensors: HF
- Sensors: H₂S
- Sensors: CO
- Features: storage of measuring results
- Features: WiFi
- Features: gas return system

Advantages & functions

| Sensor data | | | | | | |
|---------------------|-------------------|---|--|---------------------------|--------------------------|--------------------------|
| Sensor | Vol.-% | Moisture | SO ₂ | Option: HF | Option: H ₂ S | Option: CO |
| Measuring principle | Velocity of sound | Electronic dew point measurement (capacitive) | Electrochemical reaction | Electrochemical reaction | Electrochemical reaction | Electrochemical reaction |
| Measuring range | 0 – 100 vol.-% | -60 to +20 °C | 0 – 20 ppm 0 – 100 ppm 0 – 500 ppm | 0 – 10 ppm | 0 – 100 ppm | 0 – 500 ppm |
| Measuring accuracy | ± 0.5 vol.-% | ± 2 °C (to > -40 °C) ± 3 °C (to -40 °C) | ± 2 % of measuring range | ± 10 % of measuring range | ± 2 % of measuring range | ± 2 % of measuring range |

| Overview MultiAnalyser ^{SF6} | | | | | | | | | |
|---------------------------------------|---------------------------------|----------------------------------|----------|--|---|---|--------------|-----------------------------|---------------|
| Device | SF ₆ -% | | Moisture | SO ₂ to 20 ppm _v | SO ₂ to 100 ppm _v | SO ₂ to 500 ppm _v | HF to 10 ppm | H ₂ S to 100 ppm | CO to 500 ppm |
| | SF ₆ /N ₂ | SF ₆ /CF ₄ | | | | | | | |
| R101 | X | | | | | | | | |
| R102 | | | X | | | | | | |
| R111 | X | X | | | | | | | |
| R201 | X | | X | | | | | | |
| R211 | X | X | X | | | | | | |
| R301 | X | | X | X | | | | | |
| R302 | X | | X | | X | | | | |
| R303 | X | | X | | | X | | | |
| R311 | X | X | X | X | | | | | |
| R312 | X | X | X | | X | | | | |
| R313 | X | X | X | | | X | | | |
| R401 | X | | X | X | | | X | | |
| R402 | X | | X | | X | | X | | |
| R403 | X | | X | | | X | X | | |
| R413 | X | X | X | | | X | X | | |
| R601 | X | | X | X | | | X | X | X |
| R602 | X | | X | | X | | X | X | X |
| R603 | X | | X | | | X | X | X | X |
| R612 | X | X | X | | X | | X | X | X |
| R613 | X | X | X | | | X | X | X | X |

Technical data

| | |
|--|---|
| Dimensions (W x H x D) | 538 x 269 x 406 mm |
| Weight | 24 kg |
| Inlet pressure pe | 0.2 - 35 bar |
| Operating temperature | -10 to +50 °C |
| Ambient moisture | ≤ 90 % |
| Operating voltage | 85 - 264 V AC |
| Frequency | 47 - 63 Hz (exchangeable battery) |
| Number of max. measured values to be stored | 500 |
| Interface | USB / LAN / WiFi |
| Measuring time | ≤ 7 variable calculated by the system |
| Flow rate | 20 l/h SF ₆ |
| Protection class | IP65 (device closed) / IP20 (device opened) |
| Measuring principle of vol.-% sensor | Velocity of sound |
| Measuring range of vol.-% sensor | 0 – 100 vol.-% |
| Measuring accuracy of vol.-% sensor | ± 0.5 vol.-% |
| Measuring principle of moisture sensor | Electronic dew point measurement (capacitive) |
| Measuring range of moisture sensor | -60 to +20 °C |
| Measuring accuracy of moisture sensor | ± 3 °C (to < -40 °C) |
| Measuring accuracy of moisture sensor | ± 2 °C (to > -40 °C) |
| Measuring principle of SO ₂ sensor | Electrochemical reaction |
| Measuring range of SO ₂ sensor | 0 - 100 ppmv |
| Measuring accuracy of SO ₂ sensor | < ± 2 % of measuring range |
| Measuring principle of HF sensor | Electrochemical reaction |
| Measuring range of HF sensor | 0 -10 ppmv |
| Measuring accuracy of HF sensor | < ± 10 % of measuring range |
| Measuring principle of H ₂ S sensor | Electrochemical reaction |
| Measuring range of H ₂ S sensor | 0 - 100 ppm |
| Measuring accuracy of H ₂ S sensor | < ± 2 % of measuring range |
| Measuring principle of CO sensor | Electrochemical reaction |

| | |
|---------------------------------|--------------------------------|
| Measuring range of CO sensor | 0 - 500 ppm |
| Measuring accuracy of CO sensor | < ± 2 % of measuring range |

Optional accessories

| | |
|------------|--|
| Z340R42 | Adapter case for measuring devices |
| 3-826-R003 | Compressor unit for measuring devices |
| 3-531-R060 | 6 m long connecting hose with self-closing DILLO couplings (as extension hose) |
| K176R21EU | Mobile remote control router for Ethernet devices (EU) |
| K176R21NA | Mobile remote control router for Ethernet devices (NA) |
| B151R96 | Discharge gas collecting bag |

Note

Options (on request): All devices with percentage measuring system are additionally available for SF₆ concentrations in SF₆/CF₄ gas mixtures (measuring accuracy: ± 2.0 vol. -%). Thus, it is possible to switch over between the SF₆/N₂ and SF₆/CF₄ measurement.