



3-038R-R613

## **MultiAnalyser<sup>SF6</sup> (six-in-one)**

### **For gas quality analysis**

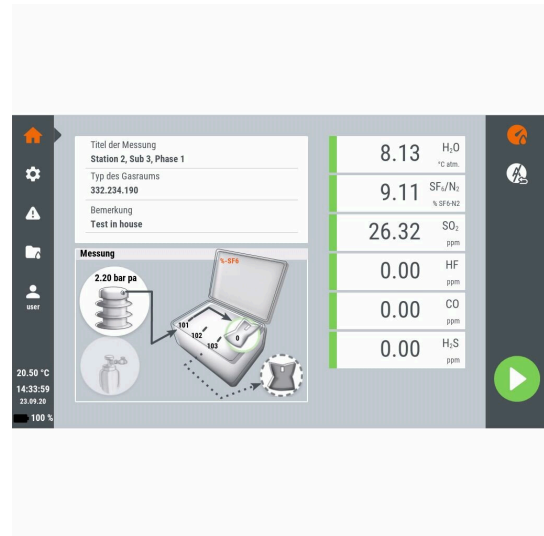
With its innovative equipment, the MultiAnalyser<sup>SF6</sup> perfectly meets the user's requirements and is ready for operation immediately after switching on. High-quality manufacture and ergonomic design guarantee the quality standards for a compact and maintenance-friendly measuring device with 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<sup>SF6</sup> 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<sup>SF6</sup>, 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<sub>V</sub>, ppm<sub>W</sub>
- indication of inlet pressure in bar, psi, MPa and kPa (in p<sub>a</sub> or p<sub>e</sub>) 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: SF<sub>6</sub>
- Sensors: percentage in CF4
- Sensors: moisture
- Sensors: SO<sub>2</sub>
- Sensors: HF
- Sensors: H<sub>2</sub>S
- Sensors: CO
- Features: storage of measuring results
- Features: WiFi
- Features: gas return system

## Advantages & functions

Sensor data						
Sensor	Vol.-%	Moisture	SO <sub>2</sub>	Option: HF	Option: H <sub>2</sub> 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 <sup>SF6</sup>									
Device	SF <sub>6</sub> -%		Moisture	SO <sub>2</sub> to 20 ppm <sub>v</sub>	SO <sub>2</sub> to 100 ppm <sub>v</sub>	SO <sub>2</sub> to 500 ppm <sub>v</sub>	HF to 10 ppm	H <sub>2</sub> S to 100 ppm	CO to 500 ppm
	SF <sub>6</sub> /N <sub>2</sub>	SF <sub>6</sub> /CF <sub>4</sub>							
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 <sub>6</sub>
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 <sub>2</sub> sensor	Electrochemical reaction
Measuring range of SO <sub>2</sub> sensor	0 - 500 ppmv
Measuring accuracy of SO <sub>2</sub> 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 <sub>2</sub> S sensor	Electrochemical reaction
Measuring range of H <sub>2</sub> S sensor	0 - 100 ppm
Measuring accuracy of H <sub>2</sub> 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	< $\pm 2$ % 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 DIL0 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 SF<sub>6</sub> concentrations in SF<sub>6</sub>/CF<sub>4</sub> gas mixtures (measuring accuracy:  $\pm 2.0$  vol. -%). Thus, it is possible to switch over between the SF<sub>6</sub>/N<sub>2</sub> and SF<sub>6</sub>/CF<sub>4</sub> measurement.