CO2-3-039R-R401

MultiAnalyser ^{CO2} (four-in-one)

For gas quality analysis

With its innovative equipment, the MultiAnalyser ^{CO2} 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 four measuring parameters with only one sample. Depending on the individual device configuration, values of the integrated sensors can be determined (Information on which parameters determine your device can be found in the technical data). Thanks to the easy-to-remove integrated battery, transport regulations are no longer an issue. Our field-replaceable sensors offer a great benefit as the device is ready for use immediately after replacement without any down times.

The MultiAnalyser ^{CO2} 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 ^{CO2}, a DILO service cart or compressor unit.

The measuring device offers intuitive 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. The remaining lifetime of the electrochemical sensors is automatically displayed. 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.

The actual product may differ slightly from the image.

Standard version

- battery operation and/or external power supply
- indication of inlet pressure in bar, psi, MPa and kPa (in pa or pe) to be selected on the touch screen
- 6 m long connecting hose with DN8 (M24x1.5) and DN20 (M43x2) 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: CO_2
- Sensors: moisture
- Sensors: O_2
- Sensors: CO_2
- Sensors: CO
- Features: storage of measuring results
- Features: WiFi
- Features: gas return system

Advantages & functions

Sensor data			
Sensor	**Measuring principle**	**Measuring range**	**Measuring accuracy**
Mol percent CO_2	Non-dispersive infrared sensor (NDIR)	0 - 100 Mol-%	≤ ± 2 Mol-%
Moisture	Electronic dew point measurement (capacitive)	- 50 °C to + 20 °C	≤ ± 2 °C (at > −40 °C) ≤ ± 3 °C (at −40 °C)
Mol percent O_2	Optical measuring principle	0 - 25 Mol-%	≤ ± 0,3 mol-% (to 12%)** ≤ ± 0,5 mol-% (to 25%)***
Concentration CO	Electrochemical reaction	0 - 500 ppm	≤ ± 2 % of measuring range

*Mol-% represents the amount of substance in a mixture and is equivalent to the ideal volume fraction. Its size is independent of pressure and temperature.
** Valid for sensor temperature of 15°C - 40°C and a pressure range of 956 mbar ±100 mbar.
*** Valid for sensor temperature of 10°C - 50°C and a pressure range of 956 mbar ±100 mbar.

Overview MultiAnalyser ^{CO2}					
Device	**CO_2 0-100 %**	**Moisture**	**O_2 0-25 %**	**CO 0-500 ppm**	
R301	X	X	X		
R401	X	X	X	X	

- emission-free measurement
- modular interchangeability of the sensors
- storage of up to 500 measuring results with name, date and time
- limit values to be set individually for each sensor
- precise measuring results for subsequent measurements can be guaranteed by automatically purging the measuring hose prior to each measurement

Technical data

Dimensions (W x H x D)	538 x 269 x 406 mm
Weight	25 kg
Inlet pressure pe	0.2 - 35 bar
Operating temperature	-10 to +50 °C
Ambient moisture	max. 90 % relative moisture, non condensing
Operating voltage	85 - 264 V AC
Frequency	47 - 63 Hz
Number of max. measured values to be stored	500
Interface	USB / LAN / WiFi
Measuring time	max. 7 min variable calculated by the system
Protection class	IP65 (device closed) / IP20 (device opened)
Measuring principle of moisture sensor	Electronic dew point measurement (capacitive)
Measuring range of moisture sensor	-50 to +20 °C
Measuring accuracy of moisture sensor	≤ ± 2 °C °C (at > −40 °C)
Measuring accuracy of moisture sensor	≤ ± 3 °C °C (at < −40 °C)
Measuring principle O_2 sensor	Electrochemical reaction
Measuring range O_2 sensor	0 - 25 mol %
Measuring accuracy O_2 sensor	≤ ± 0,3 mol % (to 12%)**
Measuring accuracy O_2 sensor	≤ ± 0,5 mol %
Measuring principle CO_2 sensor	Non-dispersive infrared sensor (NDIR)
Measuring range CO_2 sensor	0 – 100 mol %
Measuring accuracy CO_2 sensor	≤ ± 2 mol %
Measuring principle concentration CO sensor	Electrochemical reaction
Measuring accuracy concentration CO sensor	0 – 500 ppm
Measuring accuracy concentration CO sensor	≤ ± 2 % of measuring range

Optional accessories

3-826-R003	Compressor unit for measuring devices
3-531-R060	6 m long connecting hose with self-closing DILO couplings (as extension hose)
B151R96	Discharge gas collecting bag
CO2-6-1033-R003	Adapter ASEA M32x2 /DN8 M24x1.5
CO2-6-1161-R011	DILO coupling DN8 (M24x1.5) with hose connection
CO2-6-1161-R012	DILO coupling DN20 (M43x2) with hose connection
C4-6-1161-R011 C	DILO coupling DN8 (M28x1.5) with hose connection
CA-6-1161-R031	DILO coupling DN8 (M30x1.5) with hose connection
6-1161-R012	DILO coupling DN20 with hose connection
C4-6-1161-R012 C	DILO coupling DN20 (M48x2) with hose connection
CA-6-1161-R012	DILO coupling DN40 (M50x2) with hose connection
6-1161-R011	DILO coupling DN8 with hose connection