MRU – Competence in gas analysis. Since 1984.

400GD & 500GD

Multifunction gas detectors and measuring instruments.

With smart sensor quick change system.

400GD

Small, handy, easy to handle (without suction mechanism)

Multifunction detector and measuring device

- Plug & play sensors with automatic device recognition
- Optical alarm at the sensor and on the display of the device (only leak detection)
- Acoustic and vibration alarm by the device (only leak detection)
- Adjustable alarm thresholds (only leak detection)
- Indication of gas concentration in ppm, % and %LEL (HC-sensor)
- Strong Lithium-Ion battery, chargeable via Mini-USB socket
- QR-codes for measurement results, with forwarding via email

Sensor quick change system

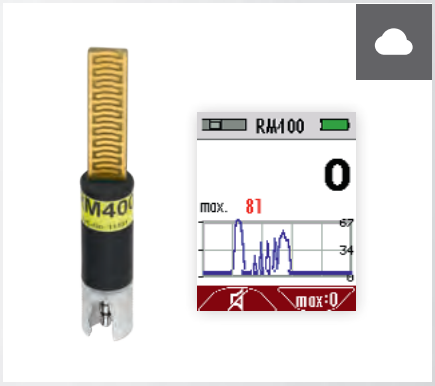
The suitable sensor for every application

Leak detection on air conditioning units

RF-sensor (refrigerant)

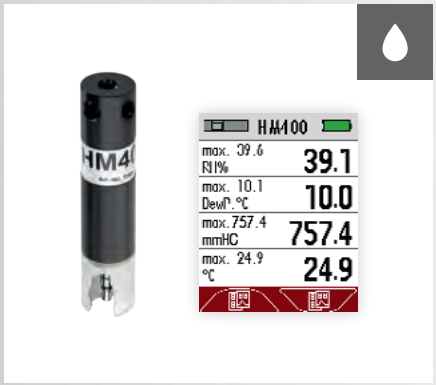
Leak detection on gas installations

HC-sensor (flammable gases)



Spillage test on flue gas systems*

RM-sensor (spillage test)



Check of indoor climate*

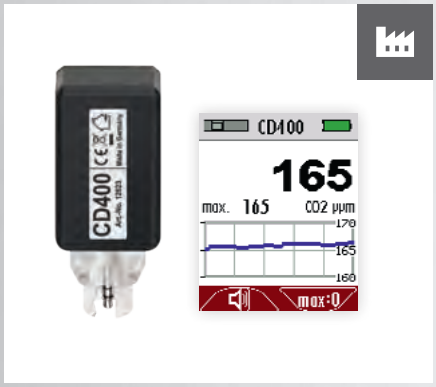
HM-sensor (humidity, temperature, barometric pressure and dew point)

Contactless temperature measurement*

IR-sensor (surface temperature)

Measurement of carbon monoxide in ambient air*

CO-sensor

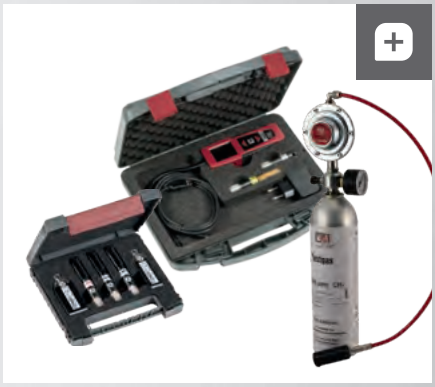


Measurement of carbon dioxide in ambient air*

CO_2-sensor

LED flashlight*

21 lumens, 5,000 K



Practical accessories

Test and calibration set as well as transport and storage case

*usage on 500GD only possible without suction feature

500GD

Fast, selective and powerful (with suction feature)

Multifunction detector and measuring device

- Fast measurement results due to integrated suction feature (1 ... 1.5 seconds)
- Search mode for quick leak detection
- Reliable zeroing, even with contaminated ambient air
- Display in ppm for precise location of gas leaks and determination of the gas concentration
- Sensor change during operation possible, automatic recognition by the device
- Adjustable alarm thresholds (only leak detection)
- Optical alarm on the display of the device (only leak detection)
- Acoustic and vibration alarm by the device (only leak detection)
- Clear graphic display (TFT)
- Strong Lithium-Ion battery, chargeable via Mini-USB socket
- Display of measurement results also as QR code (forwarding measuring results via e-mail)

400GD

Technical data

400GD basic unit	
Rel. humidity during operation, non-condensing	95 %
Display	45 mm (1.8") TFT
Interface (Charging/firmware updates)	Mini-USB
Built-in battery, operating time (depending on sensor)	Li-Ion, typ. 20 h
Operating conditions	-10°* ... +50 °C (*depending on sensor)
Storage conditions	–20 ... +60 °C
Power supply / consumption	100 ... 240 V, 5 V DC, 500 mA
Protection class	IP30
Dimensions (W x H x D)	50 x 135 x 35 mm
Weight	appr. 230 g

Plug & Play Sensors	Description	Measuring range	Resolution	Response time
CH_4 (Leak detection gas)	HC400/401/402	0 ... 44,000 ppm	1 ppm	< 5 sec.
C_3H_8 (Leak detection gas)	HC401/402	0 ... 17.000 ppm	1 ppm	< 5 sec.
H_2 (Leak detection gas)	HC402	0 ... 40,000 ppm	1 ppm	< 5 sec.
Spillage test	RM400	0 ... 100	1	< 1 sec.
Humidity (Indoor climate)	HM400	0 ... 100 % RH	0,1 %	
Temperature (Indoor climate)	HM400	0 ... +60 °C	0,1 °C	
Barometric pressure (Indoor climate)	HM400	300 ... 1,100 hPa	0,1 hPa	
Dew point	HM400	calculated from humidity and temperature		
Temperature	IR400	–70 ... +380 °C	0,1 °C	
Carbon monoxide measurement	CO400	0 ... 1,000 ppm	1 ppm	< 30 sec.
Carbon dioxide measurement	CD400	400 ... 10,000 ppm	1 ppm	90 sec.

Leak detection refrigerant	
Description	RF sensor
Reference refrigerant	R134a, H2, R410a, R1234Ze
Detectable refrigerant	CFC, HCFC, PFC, HFC, HFO
Measuring range	0 ... 1,000 ppm
Resolution	1 ppm
Detection limit	5 g/year
Response time	< 4 sec.

500GD

Technical data

500GD basic unit	
Rel. humidity during operation, non-condensing	95 %
Display	45 mm (1.8") TFT
Interface (Charging/firmware updates)	Mini-USB
Built-in battery, operating time (depending on sensor)	Li-Ion, typ. 20 h
Operating conditions	-10°* ... +50 °C (*depending on sensor)
Storage conditions	–20 ... +60 °C
Power supply/consumption	100 ... 240 V, 5 V DC, 500 mA
Protection class	IP30
Dimensions (W x H x D)	50 x 163 x 25 mm
Weight	appr. 220 g

Plug & Play Sensors	Description	Measuring range	Resolution	Response time
CH_4 (Leak detection gas)	HC400/401/402	0 ... 22,000 ppm	1 ppm	≤ 3 sec.
C_3H_8 (Leak detection gas)	HC401/402	0 ... 8.500 ppm	1 ppm	≤ 3 sec.
H_2 (Leak detection gas)	HC402	0 ... 20,000 ppm	1 ppm	≤ 5 sec.
Spillage test	RM400	0 ... 100	1	< 1 sec.
Humidity (Indoor climate)	HM400	0 ... 100 % RH	0,1 %	
Temperature (Indoor climate)	HM400	0 ... +60 °C	0,1 °C	
Barometric pressure (Indoor climate)	HM400	300 ... 1,100 hPa	0,1 hPa	
Dew point	HM400	calculated from humidity and temperature		
Temperature	IR400	–70 ... +380 °C	0,1 °C	
Carbon monoxide measurement	CO400	0 ... 1,000 ppm	1 ppm	< 30 sec.
Carbon dioxide measurement	CD400	400 ... 10,000 ppm	1 ppm	90 sec.

Leak detection refrigerant	
Description	RF sensor
Reference refrigerant	R134a, H2, R410a, R1234Ze
Detectable refrigerant	CFC, HCFC, PFC, HFC, HFO
Measuring range	0 ... 1,000 ppm
Resolution	1 ppm
Detection limit (R134a, R1234yf, R290)	1 g/year
Response time	≤ 1,5 sec.
Compliant to	DIN EN 14624

MRU – Competence in gas analysis. Since 1984.

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