



MULTI GAS ANALYSER

IR 2000

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Gas treatment system MGK 744 for drying and cleaning the gas to be measured. See the catalogue Industrial Technology, chapter 7, for details and technical specifications.

- + Extractive multi gas analysis system for simultaneous measurement of up to 8 gas types
- + Optionally extensible to 10 gas types
- + Proven infrared measurement technology
- + Application-specific versions in terms of gas types, measuring ranges, gas transport and gas treatment
- + Robust, compact measuring instrument
- + Visualisation and operation via high-contrast 5.7" colour touch display
- + Fully automatic operation
- + Completely self-monitoring
- + IR 2000 is also available as a compact system together with the gas treatment system MGK 744

Application

Suitable for fully automatic operation in process control and process monitoring applications, for long-term diagnostics and for semi-stationary use. Simultaneous determination of up to eight gas components (CO , CO_2 , C_nH_m , NO or SO_2).

NDIR analysers use the property of polyatomic, non-elementary gas to absorb infrared light. Interference filters make the sensors selectively sensitive to specific wavelengths. Cross-sensitivities are compensated for by the microprocessor. It is recommended to use a gas treatment system if the gas to be measured is humid or contains dust.



Technical specifications

		Minimum		Maximum	
Measuring range NDIR*					
	CO	0 – 1000	ppmv	0 – 100	% by volume
	CO ₂	0 – 50	ppmv	0 – 100	% by volume
	HC	0 – 1000	ppmv	0 – 2	% by volume (equiv. C ₆ H ₁₄)
	C ₃ H ₈	0 – 1000	ppmv	0 – 2	% by volume
	CH ₄	0 – 1	% by vol- ume	0 – 100	% by volume
	NO	0 – 2000	ppmv	0 – 5000	ppm
	SO ₂	0 – 1000	ppmv	0 – 2000	ppm
Measuring ranges electro-chemical					
	O ₂			0 – 21	% by volume
	NO	0 – 2500	ppmv	0 – 5000	ppmv
	NO ₂	0 – 500	ppmv	0 – 500	ppmv
Measuring ranges paramagnetic					
	O ₂			0 – 21	% by volume

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Enquire for other gases.

Mega measuring ranges*

Several measuring ranges per gas with/without automatic switching

Measuring accuracy

≤ 3 % of full scale value (NDIR)

Zero drift

≤ 1 % of full scale value/week (NDIR)

Setup time

T63 < 15 s (NDIR)

Operating temperature range

5/45 °C (* 5/35 °C)

Humidity

Up to 95 % r.h., non-condensing

Dimensions

Height: 133 mm (3 U)

Width: 449 mm (84 HP, 19" rack), with mounting elements 483 mm

Depth*: 316/376/436 mm plus mounting elements (34 mm) and connections

Weight*

Approx. 12 kg

Degree of protection

IP 20

Supply voltage

AC 230 V (AC 110 V on request); P_{max} 60 VA

Interfaces*

Digital output: RS 232

Analogue outputs: Max. 8, 0/4–20 mA, channel and limit value freely configurable

Limit values: 5 voltage-free switching outputs, freely configurable

Device and calibration status: Three voltage-free switching outputs

Features

Languages: German/English

Functions: Password-protected configuration mode, freely configurable zero and calibration cycles, internal system and fault monitoring

Gas treatment system (option)

- Internal gas cooler, electronically controlled *
- Separate inlets for zero point/gas calibration
- Particle filter
- Flow indication
- Gas pump

* Depends on configuration

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See chapter 7 for options and accessories. Please enquire for additional combinations and housing versions (wall mounting housing, portable housing), heated gas sampling probes or gas lines, Peltier and compressor type gas coolers.

PG: 4	Part no.	Price €
Gas analyser IR 2000 O₂, CO, CO₂	61076	
Gas analyser IR 2000 O₂, CO, NO	61077	
Gas analyser IR 2000 O₂, CO, CO₂, SO₂	61078	
Gas analyser IR 2000 O₂, CO, CO₂, NO	61079	
Gas analyser IR 2000 O₂, CO, CO₂, NO, SO₂	61080	