

Infrared gas analysers



Measuring range (selection) smallest measuring ranges		
CO	0 to	200 ppm
CO ₂	0 to	100 ppm
CH ₄	0 to	500 ppm
SO ₂	0 to	1000 ppm
C ₃ H ₈	0 to	100 ppm
C ₆ H ₁₄	0 to	500 ppm
NO	0 to	1000 ppm
N ₂ O	0 to	100 ppm
Frigen 11	0 to	500 ppm
Frigen 12	0 to	100 ppm
Frigen 13b	0 to	100 ppm
O ₂	0 to	10/25 Vol.-%

Please enquire for other components or different versions of the system.

Application

- Room air control (CO, CO₂, coolants)
- Monitoring of activated carbon filters (CO, CO₂)
- Monitoring of inertness (CO₂, O₂)
- Monitoring of biological processes (CO₂, O₂)
- Measurement of landfill gases (CH₄, CO₂)
- Monitoring of cold stores (O₂, coolants)
- Optimisation of heating systems (CO, O₂)

Description

This NDIR unit provides continuous operation and can selectively measure and display the concentrations of up to four different gas components. The NDIR function principle is based on the absorption of infrared radiation by heteronuclear molecule gases with several atoms. Optimum sensitivity and high selectivity with regard to other components in the measurement gas are achieved by means of opto-pneumatic radiation receivers which are optimised for the application. Due to a built-in thermostat, even extremely small measuring ranges can be covered. An optional electro-chemical sensor makes it possible to additionally measure the oxygen concentration. Measuring range for oxygen up to 25 % by vol.

Type-tested according to German directives

(TA-Luft and BImSchV 13 and 17)

for the following components:

- 0/250 mg CO
- 0/500 mg SO₂
- 0/400 mg NO
- 0/10/25 O₂ % by volume

A pressure-proof capsule version allows for use in Ex area, zones 1 and 2. The spectrum of measured components and combinations is growing constantly. An AFRISO expert will be pleased to answer any questions you have concerning your application. The conventional method with test gas can be used for calibration.

If the integrated calibration unit is used, test gas cylinders are not required. In addition, the system can be equipped with a pneumatic unit. It is also available in a housing for wall mounting.

Technical specifications

Supply voltage: AC 230 V

Gas throughput: 20/100 l/h

Analogue output: 4–20 mA

Interface: RS 232 C/V.24

Display

4-digit, backlit LCD display

Setup time: 15 s

Warming up time: 30 min.

Weight: approx. 10 kg

Design: 19" rack mounting or wall mounting

DG: E	PU	Part no.	Price €
IR Analyser CO	as 19" unit	1	69966
IR Analyser CO₂	as 19" unit	1	69967
IR Analyser NO	as 19" unit	1	69968
IR Analyser SO₂	as 19" unit	1	69969
IR Analyser CO/CO₂	as 19" unit	1	69971
IR Analyser CO/NO	as 19" unit	1	69972
IR Analyser CO/SO₂	as 19" unit	1	69973
IR Analyser NO/SO₂	as 19" unit	1	69974
IR Analyser NO/CO₂	as 19" unit	1	69975
IR Analyser NO/CO/SO₂	as 19" unit	1	69976
Additional costs:			
Additional cost for O₂ measurement		1	69977
Additional cost for wall mounting housing		1	69970
Calibration unit for 1 IR component		1	69981
2 calibration units for 2 IR components		1	69982
Pneumatic unit (pump, flow monitoring)		1	69983
2nd measuring range for single channel unit		1	69986
2nd measuring range for multi channel unit		1	69987