

Gas Analyzer System MGAS 5.x

Function:

Instrument for measuring following Gas-Concentrations:

- Carbon monoxide %CO
- Carbon dioxide %CO₂
- Hydrogen %H₂
- Methane %CH₄

Customizable Gas components are possible.

Following components will be calculated:

- C-Level from CO₂, CO and Temperature
or Temperature, CO and mV*
- Dew point from CO₂, H₂ and Temperature
or Temperature, H₂ and mV*

*mV from Lambda probe or O₂-Probe

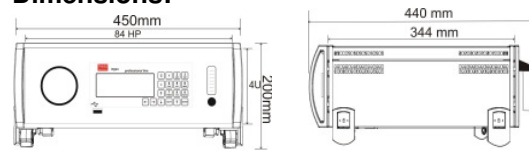
This equipment is qualified to measure furnace atmospheres online with, max. 6 different gas sensors. Eight analogous outputs, eight digital inputs / outputs and an optional serial interface are possible. The communication with the serial interface can be done with Modbus, TCP Ethernet or Profibus. All Analog and Digital inputs / outputs can be configured manual e.g. as Alarm, starting calibration or switching off pump. An optional data logging function with USB data transfer and an internal memory with 16MB is available. The logging function can work in manual or timer mode. With the delivered Software "MGas Viewer" you can visual, print, export and administrate your stored data. The equipment is adjustable by a high-quality foil keyboard with self explainable menu structure in German and English language. Automatic calibration for zero-point and span for all gas components is possible. There is an additional calibration function called "fast calibration" which allows the user to change the displayed gas concentrations manual. Additional it is possible to configure several protection functions, e.g. switching off at high Dew Point or low Process Temperature, to increase the lifetime of the Device. The advanced gas transducers represents the latest technological achievement in non-dispersive infrared gas transducers with high accuracy, good long-time stability and excellent repeatability.

Technical Data:

Construction:

Transportable Instrument (desktop)
or Rack-mounting

Dimensions:



-Desktop variant:
450 x 200 x 440 (w x h x d)

-Rack variant:
U=4, HP=84, D=400mm

Weight:

Approx. 14 kg

Protection type:

IP 20 to IEC 529

Power supply:

230V +4% / -10%, 50-60Hz or
115V ± 10%, 50-60Hz

Power:

Approx. 70W / Slow Fuse 2A in Power switch

Communication:

MODBUS
RS232, RS422, RS485
Ethernet over TCP/IP
Profibus

Heat up time:

Approx. 10 min.

Climate:


Storage: 0...50 °C
Operation: 5...40 °C

Measuring range:

CO: 0...35,0 %
CO₂: 0...0,500 %, 0...1,000 %, 0...2,000 %
H₂: 0...80,0 %
CH₄: 0...5,0 %, 0...10,0 %, 0...20,0 %
°C: 0...1200 °C
C: 0...1,50 %
O₂: 0...1300 mV
DP: -30...+30 °C

Other measurement ranges on request.

Technical data:

Measuring gas components: max. 6	
Oxygen probes: Lambda probe or O ₂ probe	
Additional calculation: % Carbon-level, °C Dew point	
Measuring method: NDIR dual wavelength principle no moving parts	
Influence values	
Drift with autocal.	insignificant
Drift without autocal.	± 2% FS over 12 months
Linearity error:	< 2% FS
Temperature dependence with autocal.	insignificant
Temperature dependence without autocal.	± 2% FS/10 °K
Pressure dependence: Compensated by internal pressure sensor between 800 mbar and 1200 mbar.	± 0.2% FS/10 mbar
Gas inputs: -Measurement gas input -Zero gas input -Reference gas input	Connection type: Hose connector 
Pressure: - Maximal pressure: 100 mbar overpressure (ü) - Working pressure: 0 do 50 mbar overpressure (ü) - Gas flow: Approximately 0,4 l/min	
Gas outputs: -Gas output 1 -Gas output 2 Pressure: Pressureless	Connection type: Hose connector 