



Gas Analyser System for heat treatment furnaces mgas

Function:

Transportable Instrument (Bench-mounting) to determine the following Gas-Concentrations:

- Carbon monoxide %CO
- Carbon dioxide %CO₂
- Hydrogen %H₂
- Methane %CH₄
- Temperature °C
(TC, Type K or S)
- Carbon-level %C
(calculated from gas components and the process temperature)

This equipment is qualified to supervise furnace atmospheres online or for sample check, max. 6 different values are shown on the display together. Standardized analogous outputs or optional a serial interface are possible.

The equipment is adjustable by a high-quality foil keyboard with self explainable text menu in german and english language. Automatic calibration for zero-point and span for all gas components together is possible.

The advanced gasmitter represents the latest technological achievement in non-dispersive infrared gas transducers with high accuracy, good long-term stability and excellent repeatability.

Technical Data:

Construction:

Transportable Instrument (Bench-mounting)

Dimensions:

437 x 155 x 395 mm (w x h x d)

Weight:

12,5 kg

Protection type:

IP 20 to IEC 529

Auxiliary supply:

230 V +/- 10 % / 50-60 Hz about device connector

Heat up time:

approx. 10 min.

Climate:

Storage: 0...50 °C

Operation: 5...40 °C

Measuring range:

CO:	0...35,0 %
CO ₂ :	0...0,500 %
H ₂ :	0...80,0 %
CH ₄ :	0...20,0 %
°C:	0...1200 °C
C:	0...1,50 %

Other measurement ranges on request.

Technical data:

Measuring gas components:

max. 4

Additional calculation:

% Carbon-level

Measuring method:

NDIR dual wavelength principle no moving parts

Influence values

Drift with autocal. neglectable

Drift without autocal. $\pm 2\%$ FS over 12 months

Linearity error: $< 2\%$ FS

Temperature dependence
with autocal. neglectable

Temperature dependence
without autocal. $\pm 2\%$ FS/10 °K

Pressure dependence: $\pm 0.2\%$ FS/10 mbar
Compensated by internal pressure sensor
between 800 mbar and 1200 mbar.