

Multi-Parameter Gas Analysis SE-MPGA

Transportable gas analysis equipment for carburizing atmospheres, including data logger

Comparative measurements according to CQI9

NEW!



New Version !

Transportable gas analysis system for carburizing atmosphere

The device continuously measures the gas components CO, CO₂, CH₄ and H₂ in carburizing atmospheres. The C-level, the soot limit and the gas constant Beta are calculated from the measured values.

For comparative measurement according to CQI9, the C-level is calculated in parallel on the basis of the probe signal. A zirconium dioxide probe and a thermocouple can be connected for this purpose. Probe signal and temperature can also be simulated by manual input.

All measured and calculated values are shown on the display and can be logged in the device for later evaluation. The recording can be controlled manually or by timer.

Included in delivery is the PC software MPGA-Logger, with which the data can be read out, evaluated, printed or e.g. exported into the ECS format.

The new version of the gas analysis system has a capacitive touch display with a size of 7 inches (17.8 cm) and can now be operated even better.

With the internal timers, up to 3 potential-free external contacts can now be optionally switched, which can be used for control tasks, e.g. recording of several furnace systems by cyclic switching of the gas supply. Optionally, the measurement data can now also be provided externally via 4-20 mA outputs.

Fields of application:

- Gas analysis of carburizing processes, verification of endogas
- Comparative measurements according to CQI9
- Compliant with SAE AMS 2759

Technical Data

- Measuring range carbon monoxide: 0 ... 30 Vol.% (optional 0 ... 50 Vol.%)
- Measuring range carbon dioxide: 0 ... 0.5 Vol.% and 0 ... 2 Vol.% with automatic changeover
- Measuring range methane: 0 ... 10 Vol.% (optional 0 ... 25 Vol.%)
- Measuring range hydrogen: 0 ... 60 Vol.% (optional 0 ... 100 Vol.%)
- Calculated C-level: 0 ... 2 %C
- Accuracy of measurement: $\pm 1\%$ relative error (from full scale reading)
- Ambient temperature: 5 - 45 °C
- Heating period: approx. 30 min
- Moisture content of measuring gas: 0 ... 10 % relative humidity (condensing humidity is not permitted)
- Withdrawal of gas: integrated filter and flow meter
- Gas flow rate: approx. 0.1 ... 0.2 l/min (integrated pump)
- Measuring speed: <math>< 2</math> min
- Interfaces: Mini-USB to read out the data, RS 232 for factory services
- Dimensions: 19" housing, 4U
- Weight: approx. 10 kg
- Connections: Zirconium oxide probe, **thermocouples (Type K, N or S)**

Scope of delivery:

Stylus for touch display, mini-USB cable, replacement filter insert, potassium hydroxide (KOH) filter for CO₂ zero point calibration, license for ECS Analysis, USB memory stick with PC software MPGA-Logger, carrying case

2 x Mating plug for the connection of thermocouple and C-probe

2 x Diffusion-proof hose (3 meter)

Instruction by Stange Elektronik employees (excl. additional costs)

Options:

Differential pressure bubble-off bottle

Gas conditioning (Peltier gas cooler with pump and flow meter)

