

CONTINUOUS EMISSION MONITORING



*We care about the environment*

# PRECISE TECHNIQUES FOR POWERFUL TASKS

O<sub>2</sub>

CO

CO<sub>2</sub>

NO

NO<sub>2</sub>

SO<sub>2</sub>

HC

°C

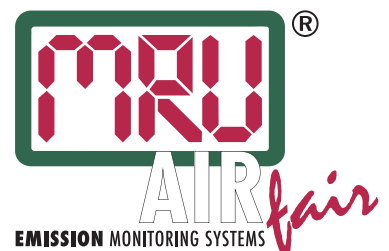
RS 232  
RS 485

4 - 20  
mA

COMPLETE  
SAMPLE  
CONDITIONING



SWG 200<sup>-1</sup> / 300<sup>-1</sup>







# SWG 300<sup>-1</sup> CEM SYSTEM

## Continuous Emission Monitoring system for environmental measurement technology

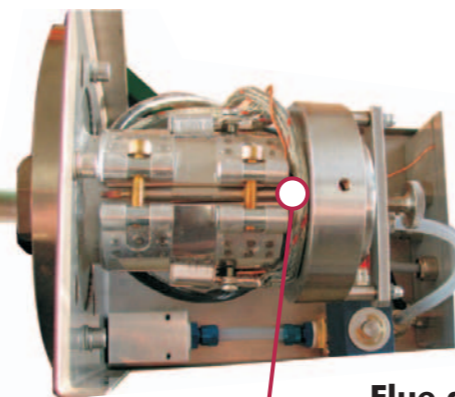
## Customized design of analysis system

O <sub>2</sub>	0 - 25 %	paramagnetic sensor
O <sub>2</sub>	0 - 25 %	ZrO <sub>2</sub> -sensor
O <sub>2</sub>	0 - 25 %	electrochemical sensor
CO <sub>2</sub>	0 - 20 %	NDIR bench

	min. range	max. range	
CO	0 - 100 ppm	0 - 4.000 ppm	NDIR bench
NO	0 - 200 ppm	0 - 4.000 ppm	
SO <sub>2</sub>	0 - 100 ppm	0 - 4.000 ppm	
CO <sub>2</sub>	0 - 5 %	0 - 20 %	
HC	0 - 100 ppm	0 - 5.000 ppm	

(other measuring ranges on request)

- designed to solve your particular measuring problems
- based on standard extractive method for flue gas analysis
- complete, integrated gas sample conditioning system with:
  - gas sampling probe with easy access heated filter and automatic backpurging
  - heated sample line, temperature regulated
  - gas cooler with automatic condensate draining
  - gas sample flow rate monitoring
- combines non dispersive infrared technology sensor modules for CO, CO<sub>2</sub>, NO, SO<sub>2</sub> and HC
- with long-life electrochemical sensor ZrO<sub>2</sub> or paramagnetic cell for O<sub>2</sub> and catalytic converter for NO<sub>2</sub>
- complete diagnosis of system components
- auto-zero adjustment
- automatic calibration by means of calibration gas cylinders
- complete analysis system installed on site
- easy operation via menu guided software, integrated keypad and large, backlit LCD



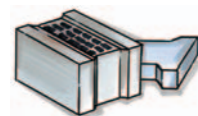
Flue gas temperature up to 1.700°C

- choice of flue gas sampling probe
  - heavy duty probe HD with heated filter, backpurging and heated sample line
  - low dust gas sampling probe LD, non heated
- complete sample gas conditioner inside analyzer
- 8 channels analog outputs 4 - 20 mA
- local, backlit LCD
- flue gas temperature (up to 1.700°C) and combustion air temperature measurement with comprehensive environmental and combustion calculation
- RS 485 interface for long distance data transfer
- PC based software for data acquisition and evaluation
- weatherproof shelter with air conditioning (option)
- dust monitor or flue gas flow measurement on request



SWG 300<sup>-1</sup> is designed for the use in almost every industry sectors like:

- cement
- petrochemical
- power plants
- iron & steel
- large boilers, process heaters
- glass treating
- gas compression engines
- others



Heavy duty gas sampling probe with heated ceramic filter with backpurging and heated sample line

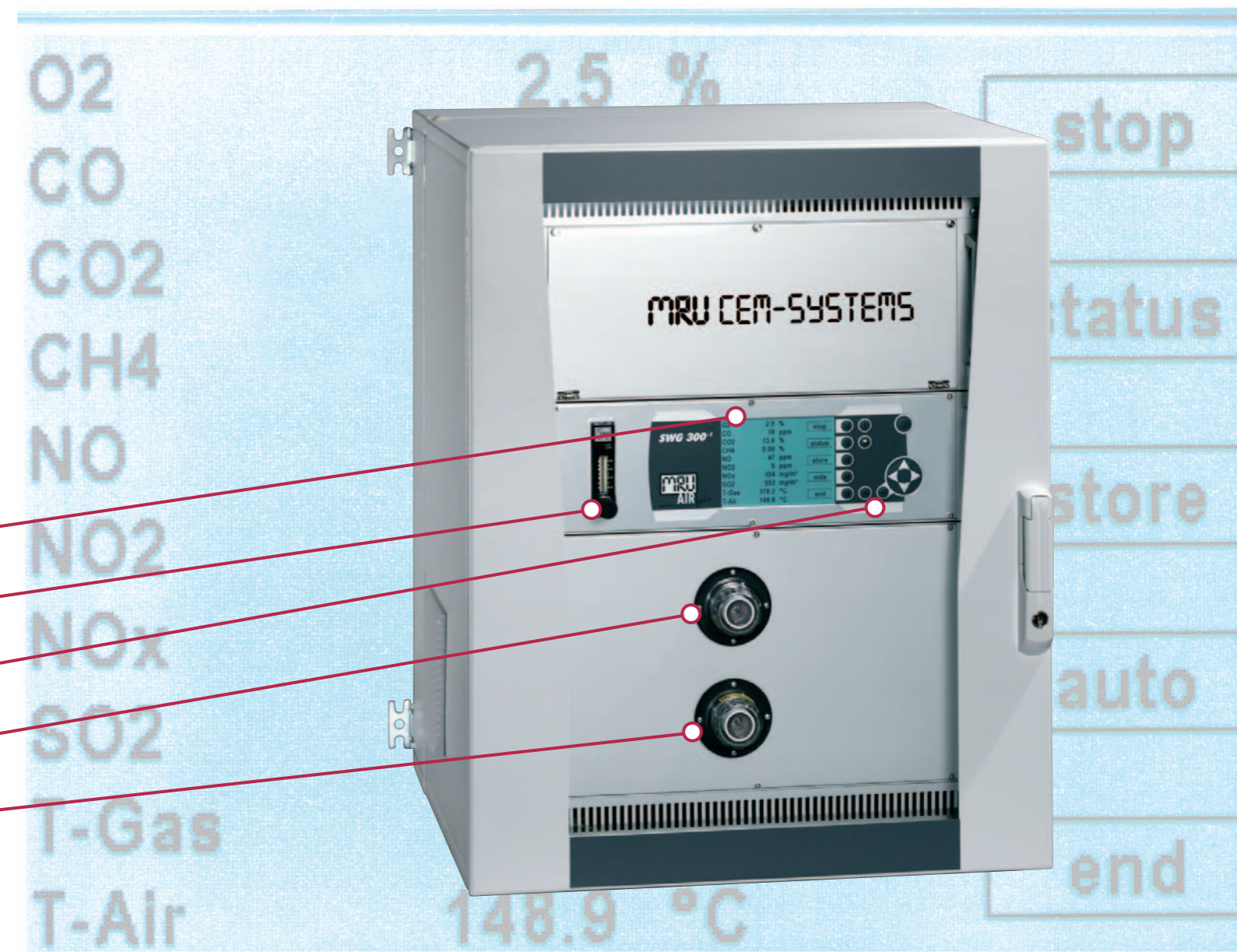
Backlit LCD

Flow meter

Keypad

Particle filter

Particle filter





# CONTINUOUS EMISSION MONITORING



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## SWG 200<sup>-1</sup>

## flue gas analysis for process gas and environmental measuring applications



- designed to solve your particular measuring problems
- based on standard extractive method
- complete gas sample conditioning system with:
  - gas sampling probe
  - gas cooler with automatic condensate draining
- combines non dispersive infrared technology sensor modules (CO<sub>2</sub>, HC, CO)
- with long-life electrochemical sensors (O<sub>2</sub>, CO, NO, NO<sub>2</sub>)
- flue gas analysis, customized designed for
- complete diagnosis of system components
- auto-zero adjustment
- complete analysis system installed on site
- easy operation via menu guided software and backlit LCD
- environmental and combustion calculations with temperature measurement and a large list of programmed fuels

O <sub>2</sub>	0 - 21 %	electrochemical sensor module
CO	0 - 10.000 ppm	
NO	0 - 4.000 ppm	
NO <sub>2</sub>	0 - 1.000 ppm	

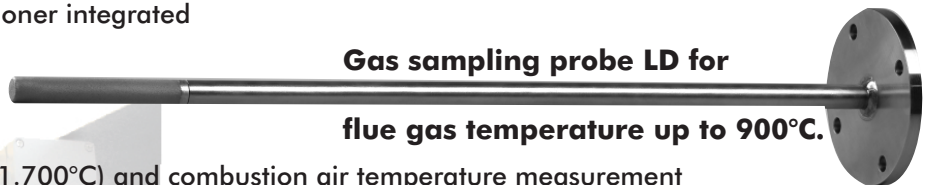
	min. range	max. range	
CO	0 - 1.000 ppm	0 - 50 %	NDIR bench
CO <sub>2</sub>	0 - 5 %	0 - 50 %	
HC	0 - 5.000 ppm	0 - 50 %	

(other measuring ranges on request)

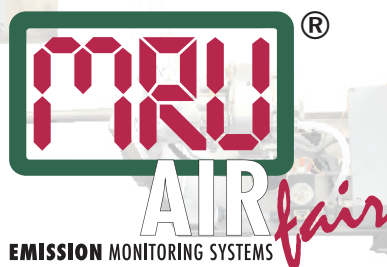
- choice of flue gas sampling probe
  - lowdust gas sampling probe LD, non heated
  - heavy duty probe with heated filter HD, with backpurging
- complete sample gas conditioner integrated
- digital interface RS 485
- analog outputs 4 - 20 mA
- local, backlit LCD
- flue gas temperature (up to 1.700°C) and combustion air temperature measurement
- PC based software for data aquisition and evaluation

### Gas sampling probe LD for

flue gas temperature up to 900°C.



Dealers stamp



MRU  
 Measuring instruments for flue gases  
 and environmental protection GmbH  
 Fuchshalde 8  
 D-74172 Neckarsulm-Obereisesheim  
 Tel. +49 71 32 99 62 - 0 \* Fax 99 62 20  
 info@mru.de \* www.mru.de

Please ask via phone, fax or e-mail for our technical questionnaire.