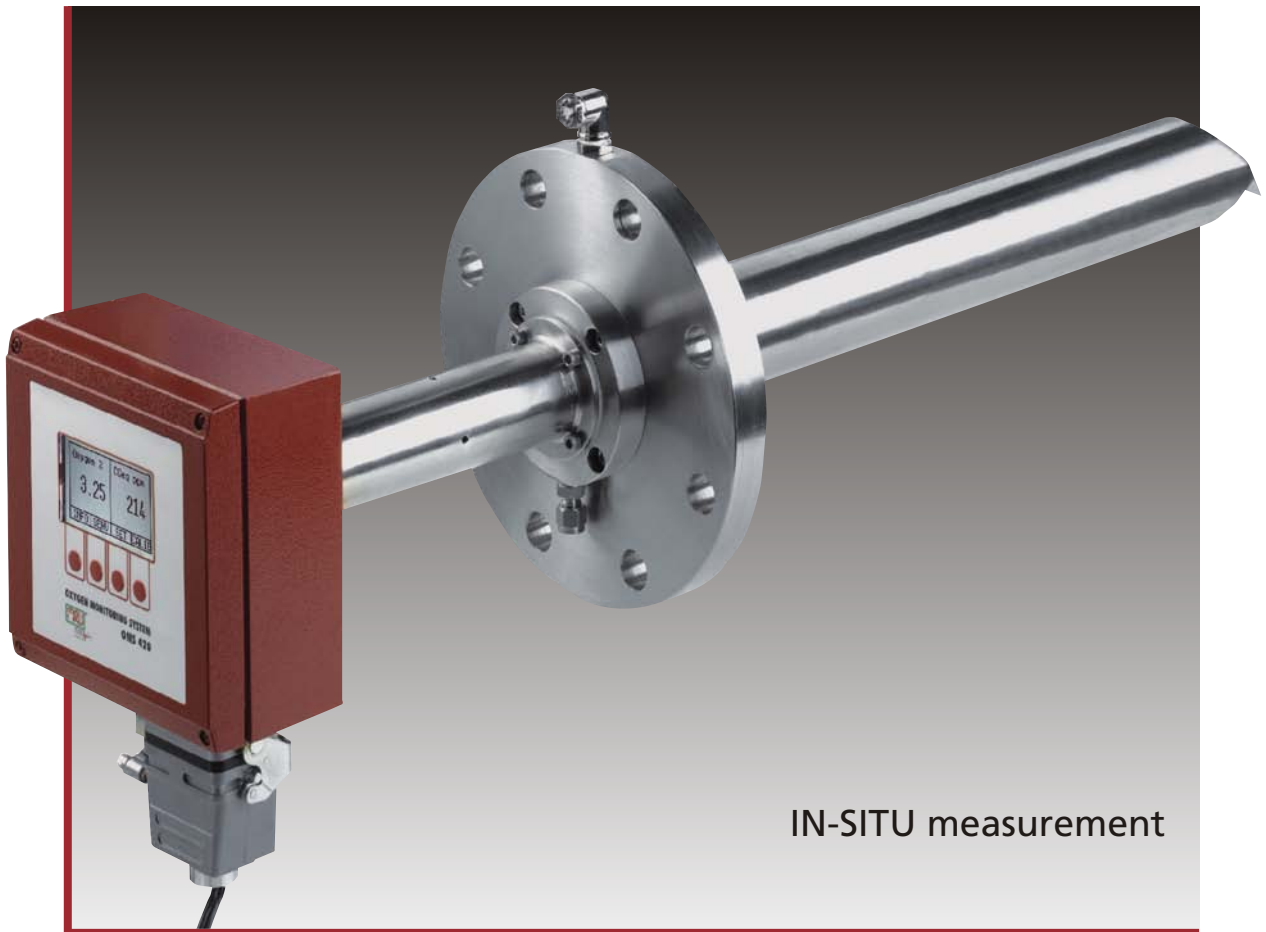




EMISSION MONITORING SYSTEMS

We *care* about the environment

REDUCE COSTS WITH COMBUSTION REAL TIME ANALYSIS



OMS 420

Combustion optimisation
by means of simultaneous
O₂ and CO_e monitoring



O₂ CO_e

OMS 420

IN-SITU real time analysis
Oxygen (O₂) and
combustibles (CO_e)*

Measuring principle

Oxygen (O₂) = ZrO₂ zirconium oxide
CO_e (combustibles) = heated solid electrolyte

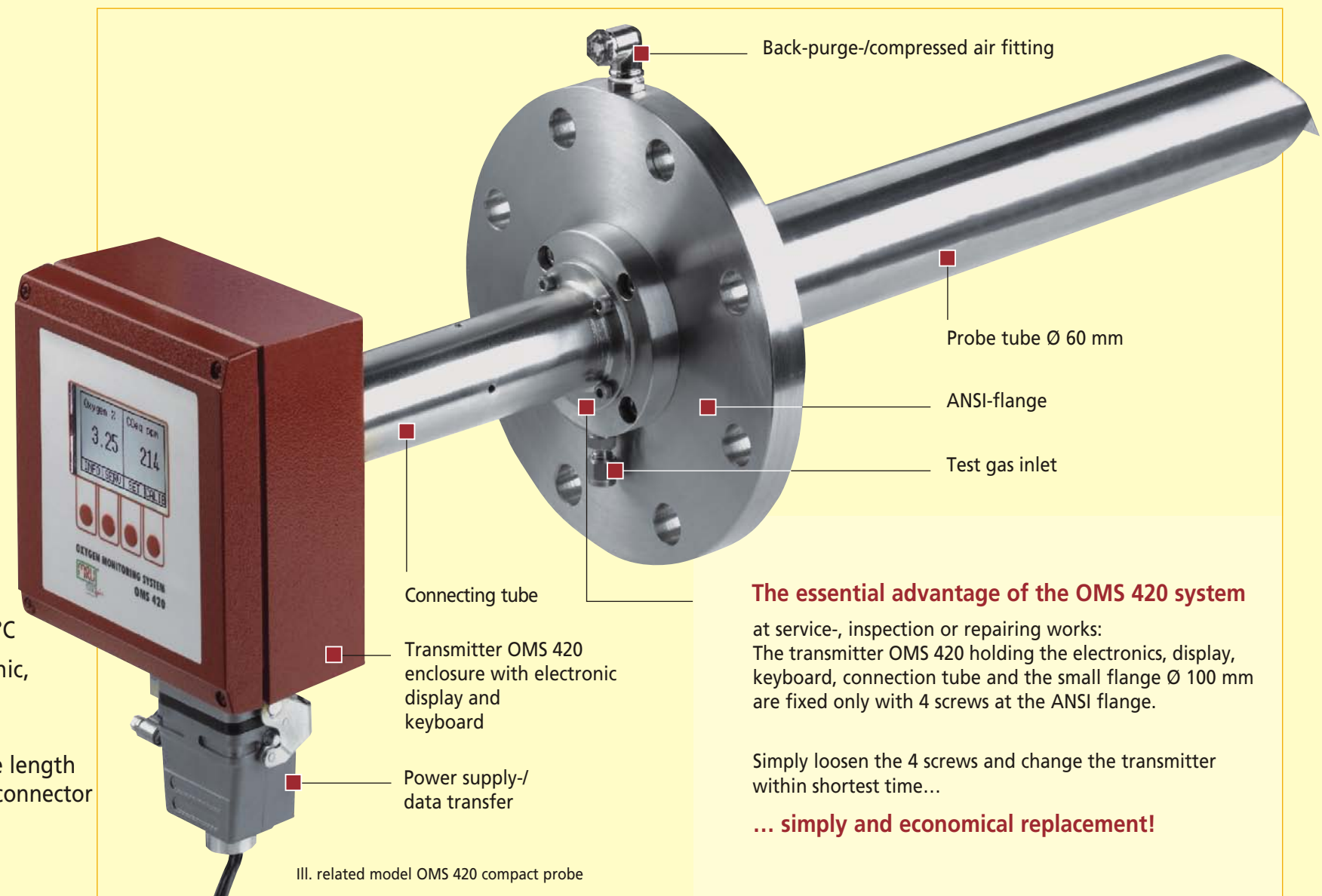
* total of flue gas combustibles (CO + H₂ + C_xH_y)
displayed as equivalent CO

Standard features

- Clean combustion (low dust) with combustion temperatures up to max. 1.000 °C
- Die casting aluminium enclosure with electronic, keyboard, front-up display of **O₂** and **CO_e**
- Standard ANSI-flange with variable probe tube length Ø 60 mm and with back-purge-/compressed air connector (other flanges e.g. DIN on request)
- Connecting tube with with reference air inlet with small flange, Ø 100 mm
- Rugged industrial plug für power supply and data transfer (analog 4 ... 20 mA, digital RS 485)

Options

- CO_e measurement
- Compressed air back-purge with control valve complete with electronic, incl. adjustable intervals - recommended for high dust sites -
- Automatic calibration for span and offset by means of pneumatic unit PU 420
- Application with high temperatures up to approx. 1.700 °C with ceramic tube and ejector (model HT)
- Remote control- and display unit max. 10 m (model RT) for applications with high ambient-/ radiation temperature >50 °C

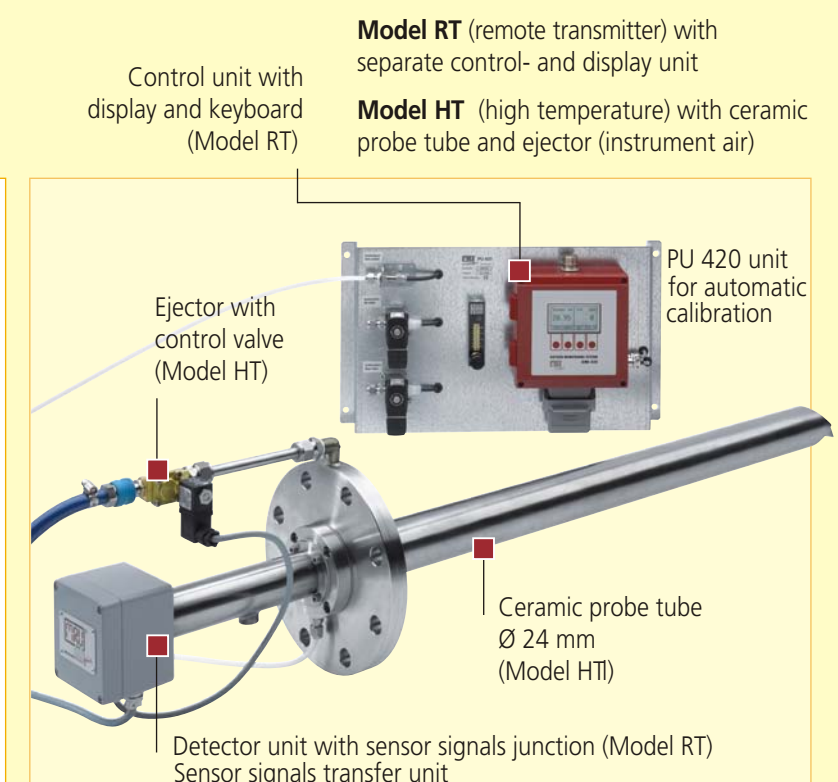
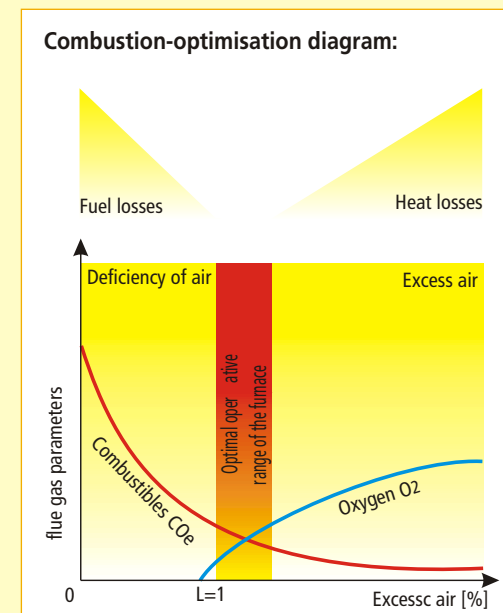


The essential advantage of the OMS 420 system

at service-, inspection or repairing works:
The transmitter OMS 420 holding the electronics, display, keyboard, connection tube and the small flange Ø 100 mm are fixed only with 4 screws at the ANSI flange.

Simply loosen the 4 screws and change the transmitter within shortest time...

... simply and economical replacement!



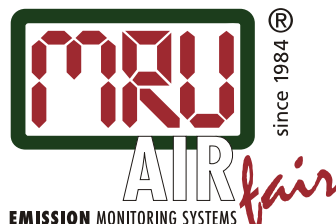
Picture shows model OMS 420 RT

Technical specifications

Warm up time	min. 30 minutes
Measuring range	0,1 ... 25 % Vol.-% O ₂ 0 ... 1.000 ppm CO _e (option combustibles measurement)
Accuracy	O ₂ : ±0,2 % or ±5 % of reading, whichever is larger CO _e : ±50 ppm or ±10 % of reading, whichever is larger
Flange	ANSI flange: Ø 230 mm / probe tuber: Ø 60 mm, up to max. 4,0 m length or flange DN80 PN16
Flange temperature	min. +70 °C ... max. +150 °C (condensation at the flange of stack gas must be avoided)
Response time T90	<10 seconds
Analog outputs	2 x current loop 4 ... 20 mA, with galvanic isolation linearized for both 0 ... 25 % O ₂ and 0 ... 1000 ppm CO _e (user free range changing in 0,5% steps is available)
Digital output	galvanic isolated RS 485 (with Modbus protocol)
Power supply	18 ... 24 Vdc (for model OMS 420), 90 ... 100 W 100 ... 240 Vac (for model OMS 420 RT and HT) max. 100 W
Probe connection (only model OMS 420)	special cable with: 2 x for power supply 24 Vdc (model OMS 420) add. 1 x for FG (grounding) 2 x for power supply 100 ... 240 Vac (model OMS 420 RT) 2 x for signal RS 485 input, 2 x for signal RS 485 output 2 x for 4 ... 20 mA analog output O ₂ 2 x for 4 ... 20 mA analog output CO _e
Electronic of transmitter	with local microprocessor, display and 4 push-buttons
Calibration inlet	with test gas fitting for 6/4 mm tube cal gas supplied manually or automaticly by pneumatic unit PU 420
Back-purge inlet	min. 6 ... 8 bar compressed air with quick connector for 8 mm tube
Ambient temperature of electronics	-20 °C ... +55 °C
Enclosure	Die casting aluminium, 160 x 160 x 60 mm and 200 mm probe tube, Ø 50 mm
Protection class	IP 65
Weight	3,5 kg (without probe and flange) 13,5 kg with 600 mm probe and flange 27,5 kg with 1.800 mm probe and flange

Data subject to change without notice.

Dealer:



MRU · Measuring instruments for flue gases and environmental protection GmbH
Fuchshalde 8 · 74172 Neckarsulm-Obereisesheim
Phone +49 71 32-99620 · Fax +49 71 32-996220
info@mru.de · www.mru.eu