v1.17

CONTINUOUS EMISSIONS MONITORING SYSTEM CEMS II e

General parameters

Measuring principle:	FTIR (Fourier Transform Infrared)
Performance:	Simultaneous analysis of up to 50 gas components
Operating temperature:	20 ± 20 °C, non-condensing,
Storage temperature:	-20 - +60 °C
Response time, T_{90}:	< 120 s
Gas cell temperature:	180 °C
Sample gas:	Non-condensing, particle free
Flow rate:	~ 4 liters per minute
Sample gas pressure:	Ambient
Installation place:	Dust free and clean ambient air, without external vibrations

Measuring parameters

Zero-point calibration:	24 hours, calibration with nitrogen (5.0 or higher N_2 recommended).
Zero-point drift:	< 2 % of measuring range per zero-point calibration interval.
Sensitivity drift:	none
Linearity deviation:	< 2 % of measuring range
Temperature drifts:	< 2 % of measuring range per 10 K temperature change
Pressure influence:	1 % change of measuring value for 1 % sample pressure change. Ambient pressure changes measured and compensated.

Signals (standard)

Analog output:

- **Output range:** 4 - 20 mA, isolated
- **Channels**: 16 freely programmable

Analog input:

- **Input range:** 4 - 20 mA, isolated
- **Channels**: 8 freely programmable

Digital output:

- **Output range:** 24 VDC
- **Channels**: 15 freely programmable + 4 fixed
- **Fixed relay outputs:** System alarm, Service Request, Maintenance, Concentration alarm, Results Valid

Digital input:

- **Control:** By potential free contacts
- **Channels**: 16 freely programmable

More digital and analog signals available upon request.

Interfaces

Standard:	RS232
Option:	RS422/485
Protocol options:	ModBus RTU, ASCII, DDE link, AK, ModBus, TCP/IP (extra hw needed), Profibus DP (extra hw needed)

Industrial computer

See *Gasmet Industrial Computer Technical Data Sheet*

Air conditioning

Cooling capacity:	A35 °C / A35 °C 1500 W A50 °C / A35 °C 1100 W
Internal circulation:	500 m^3/h

Gasmet Technologies Oy | STREET ADDRESS: Mestarintie 6 01730 Vantaa, Finland | TEL: +358 9 7590 0400 EMAIL: contact@gasmet.fi | WEB: www.gasmet.com VAT NO: FI26818038

Electrical connections

Main supply:	3 x 16 A, 3 x L+N+PE
Power consumption:	The full Gasmet CEMS II *e* including sample probe and heated lines (21 m) is max. 7.5 kW while heating up

Instrument air

Instrument air inlet:	6 mm tube
Instrument air quality:	Dry, oil and particle free
Consumption:	1 l/min with continuous instrument purge 15 l/min with safety flushing (error mode) 50 l/min with waste gas dilution (optional)

Enclosure

Material:	Bake painted steel
Dimensions:	**CEMS II *e* A** 212 x 61 x 70 cm (A/C unit on the cabinet roof) **CEMS II *e* B** 210 x 61 x 113 cm (A/C unit at the back of the cabinet) Dimensions H x W x D
Weight:	~290 kg (A), ~330 kg (B)
Protection:	IP 54

Gasmet Technologies Oy
STREET ADDRESS:
Mestarintie 6
01730 Vantaa, Finland
TEL: +358 9 7590 0400
EMAIL: contact@gasmet.fi
WEB: www.gasmet.com
VAT NO: FI26818038