

# TECHNICAL DATA SHEET

## ecom-D COMPACT FLUE GAS ANALYSIS

Handy, compact and perfect for control measurements, even on industrial systems

The ecom-D was specially developed for the requirements of industrial environments - for combustion technicians looking for a reliable, compact solution for fast flue gas measurements. Thanks to the clever device design and integrated holding magnets, even freehand measurements are possible. This saves time and makes on-site use particularly efficient.

Technically, the ecom-D offers everything needed for precise control measurements on industrial combustion systems. A reliable companion for daily service work.



Dimensions: approx. 220 x 125 x 855 mm (W x H x D)  
Weight: approx. 2 kg with sampling system

### Technical data

Measured values	Range	Resolution	Accuracy *= Higher value prevails		
✓ = Standard; ● = Optional EC; ● = Optional NDIR; ● = Optional Pellistor					
Maximum number of measurable gas components				6	
O <sub>2</sub>	0...21 %	0,1 vol. %	± 0,3 vol. %	✓	
CO (H <sub>2</sub> -comp.)	0...2.500 ppm (10.000 ppm)	1 ppm	± 20 ppm / 5 % of measured value*	✓	
CO (n. H <sub>2</sub> -comp)	0...20.000 ppm	1 ppm	± 40 ppm / 10 % of measured value*	•	
CO%	0...63.000 ppm	5 ppm	± 100 ppm / 10 % of measured value*	•	
CO <sub>2</sub>	0...100 vol. %	0,01 vol. %	up to 5 % of the measuring range end value	•	
NO	0...5.000 ppm	1 ppm	± 5 ppm / 5 % of measured value*	•	
NO <sub>ExtraLow</sub>	0...300 ppm	0,1 ppm	± 2 ppm / 5 % of measured value*	•	
NO <sub>2</sub>	0...1.000 ppm	1 ppm	± 5 ppm / 5 % of measured value*	•	
NO <sub>2 Low</sub>	0...100 ppm	0,1 ppm	± 5 ppm / 5 % of measured value*	•	
SO <sub>2</sub>	0...5.000 ppm	1 ppm	± 10 ppm / 5 % of measured value*	•	
SO <sub>2 Low CO</sub>	0...5.000 ppm	1 ppm	± 10 ppm / 5 % of measured value*	•	
SO <sub>2 Low</sub>	0...100 ppm	0,1 ppm	± 5 ppm / 5 % of measured value*	•	
H <sub>2</sub>	0...2.000 ppm	1 ppm	± 10 ppm / 5 % of measured value*	•	
H <sub>2</sub>	0...20.000 ppm	1 ppm	± 100 ppm / 5 % of measured value*	•	
H <sub>2</sub> S	0...1.000 ppm	1 ppm	± 10 ppm / 5 % of measured value*	•	
CH <sub>4</sub>	0...5 vol. %	0,01 vol. %	± 0,2 vol. % / 5 % of measured value*	•	
CH <sub>4</sub>	0...100 vol. %	0,1 vol. %	± 5 % of the measuring range end value	•	
C <sub>x</sub> H <sub>y</sub>	0...4 vol. %	0,01 vol. %		•	
Other measured variables	Range	Resolution	Accuracy *= Higher value prevails		
T-Gas	0...500 °C	1 °C	± 2 °C / 1,5 % of measured value*	✓	
	0...1.100 °C	0,1 °C	± 2 °C / 1,5 % of measured value*	•	
T-Air	0...99 °C	0,1 °C	± 1 °C	✓	
Pressure   ΔP	± 100 hPa	0,01 hPa	± 0,5 hPa / 1 % of measured value*	✓	
Calculation values		Range			
CO <sub>2</sub>		0...CO <sub>2 max</sub>			✓
Combustion efficiency (ETA)		0...120 %			✓
Excess air (Lambda)		>1			✓
Losses qA		0...100 %			✓
CO <sub>(U)</sub> undiluted		x ppm			✓
Dew pointt		x° C			✓
mg/m³		x mg/m³			✓
mg/kWh		x mg/kWh			✓
O <sub>2</sub> reference		x % O <sub>2</sub>			✓

### Equipment

Gas sampling	
Unheated probe 250 mm, Ø 10 mm	✓
3-chamber sampling tubing 2,6 m	✓
3-chamber NO <sub>x</sub> tubing with PTFE inner coating	•
Unheated probes Ø 10 mm in alternative lengths	•
High temperature probe	•
Measurement gas preparation	
Electronic condensate monitoring	✓
Electronic mini sample gas cooler	•
Combustion air temperature measurement	
T-room sensor with cable, cone and magnet	✓
Operation safety	
Pressure-equalizing gas duct plate	✓
Temperature display for stream core search	✓
Automatic self-test in the calibration phase	✓
CO switch-off by concentration overload	✓
Fresh air purge by CO exceeding	✓
Fresh air purge after measuring operation	✓
Data processing	
IR interface for optional printer	✓
Integrated high-speed thermal printer	•
Infrared thermal printer	•
External memory via SD card	✓
Wireless data interface (BLE) for connection with mobile devices	✓
WiFi interface (instead of BLE)	•
Serial interface	✓
USB interface	✓
Data display / input	
LCD display, backlit, zoomable	✓
Backlit keyboard	✓
Transport	
Textile transport bag	•
Hard-shell transport case	•
Proof of conformity / calibration	
EN 50379-2	✓
1. BlmSchV	✓
Certificate after climate chamber calibration	✓

