

# TECHNICAL DATA SHEET

## ecom-J2KN<sub>pro</sub> <sup>Industry</sup> MOBILE FLUE GAS ANALYSIS

The variably equipped mobile measuring device with radio remote control for monitoring emission values

The device offers a removable wireless control module with colour display and is equipped with longlife O<sub>2</sub> and CO sensors in the basic version, expandable up to six sensors at a total. An infrared bank for up to three gas components can be added as an option. The CO sensor is equipped with overload protection and a fresh air purge to ensure uninterrupted measurements of the other parameters.

A low-maintenance, high-performance sample gas pump and a solenoid valve, which enables quasi-continuous measurement, ensure fast and reliable emission measurements at industrial plants.

### Technical data

Measured values	Range	Resolution	Accuracy * = Higher value prevails	
✓ = Standard; ● = Optional EC; ● = Optional NDIR; ● = Optional Pellistor				
Maximum number of measurable gas components				9
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. %		•
C <sub>x</sub> H <sub>y</sub>	0...4 vol. %	0,01 vol. %		•
C <sub>x</sub> H <sub>y</sub> (propane)	0...2.000 ppm	1 ppm	± 4 ppm / 3 % of measured value*	•
C <sub>x</sub> H <sub>y</sub> (methane)	0...3 %	0,001 %	± 0,005 vol. % / 3 % of measured value*	•
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	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 point		x °C		✓
mg/m <sup>3</sup>		x mg/m <sup>3</sup>		✓
mg/kWh		x mg/kWh		✓
O <sub>2</sub> reference		x % O <sub>2</sub>		✓



Dimensions: approx. 510 x 315 x 250 mm (W x H x D)  
Weight: approx. 13 kg without sampling system

### Equipment

Gas sampling	
Heated probe various lengths, Ø 10 mm	•
Heated sampling system	•
3-chamber NO <sub>x</sub> tubing with PTFE inner coating	•
Measurement gas preparation	
Electronic condensate monitoring	✓
Automatic condensation evacuation	✓
Electronic sample gas cooler	✓
Combustion air temperature measurement	
T-room sensor with cable, cone and magnet	✓
Operation safety	
Pressure-equalizing gas duct plate	✓
Heated gas duct plate	✓
Temperature display for stream core search	✓
Internal air pressure sensor	✓
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	✓
Flow meter for pump performance check	✓
Solenoid valve for quasi-continuous measurements	✓
Pollutant filter for CO sensor	✓
Special PTFE filter for IR bench	•
Data processing	
Integrated high-speed thermal printer	✓
External memory via SD card	✓
Wireless data interface (BLE)	✓
WiFi interface (instead of BLE)	•
Serial interface	✓
USB interface	✓
Data display / input	
TFT colour display, backlit, zoomable	✓
Backlit keyboard	✓
Removable control unit with magnets on the back	✓
Transport	
Aluminium-framed case with carrying strap	✓
Undercase	•
Proof of conformity / calibration	
EN 50379-2	✓
1. BImSchV	✓
Certificate after climate chamber calibration	✓



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