

ecom-J2KN_{pro} IN and INS

Flue gas Analysis for Industrial and Semi-industrial Applications

Product Features

- Detachable control module for wireless radio transfer, up to 50 m at free sight. Command function for remote data storage and printout. Powerful rear magnet for easy positioning on metal surface and free hands for work
- Up to 8 gas parameters (electrochemical sensors/IR bench)
- ± 100 hPa differential pressure measurement
- Integral thermal quick-printer
- Backlit display (daylight-capable)
- Electronic condensate monitoring
- Professional gas preparation thru Peltier cooler with automatic condensate evacuation
- Sampling system customizable acc. to needs (3-chamber silicone tubing, special NO_x/SO₂ tubing with Teflon sleeve or heated sampling system)
- T-Room sensor with magnet for easy fixation on metal surfaces
- Suitable for quasi-continuous emission measurement
- Instrument inner heating (heated gas channel plate)
- Integral module for data storage on MM card (card optional)
- Wireless Bluetooth or Wi-Fi data transfer module (each optional)
- ecom PC software free of charge
- Comprehensive accessory program

Measured values

- O₂ (0-21%)
- CO (0-4000 ppm)
- Air temperature (0-99°C)
- Gas temperature (0-500°C)
- Pressure (± 100 hPa)
- Differential pressure (± 100 hPa)
- Internal air pressure sensor (300-1100 hPa)
- Internal flow measurement

Options:

Electrochemical sensors:

- NO measurement (0-5000 ppm)
- NO₂ measurement (0-1000 ppm)
- SO₂ measurement (0-5000 ppm)
- CO extended range (0-10.000 ppm)
- CO% measurement (0-63.000 ppm)
- C_xH_y measurement (0-4 vol.% catalytic)
- H₂ measurement (0-2000 or 0-20.000 ppm)
- H₂S measurement (0-1000 ppm)
- NH₃ (model INS only) (0-1000 ppm)
- HCl (model INS only) (0-100 ppm)

Infrared bench:

- CO% (0-63.000 ppm)
- CO₂ (0-20%)
- C₃H₈ (0-2000 ppm)
- CH₄ (0-30.000 ppm)
- Differential temperature
- Soot measurement

Calculated Values

CO₂, CO_(undiluted) losses, efficiency (0-120%), dew point, mg/kWh, mg/m³, adjustable O₂ ref.

Display

- LC display, 78 x 58 mm, 320 x 240 dots
- Graphic-capable, daylight-capable
- Backlit for optimal reading also in the dark



NEW: Wireless data transfer via Wi-Fi



Battery box



Heated sampling system

Sampling System Options (depending on application)

- Sampling soot probe pistol style, unheated, 300 mm with 3-chamber tubing 3 m
- Sampling soot probe pistol style, heated for soot measurement, 300 mm with 3-chamber tubing 3 m
- Special 3-chamber tubing for NO_x/SO₂ measurement, 3.5 m
- High-temperature probe tips for range up to 1100°C
- Heated sampling system (for top accuracy by e.g. NO_x, SO₂, etc.)

Measurement Gas Preparation

- Quick gas transport (measurement values available promptly)
- Heated gas channel plate for prevention of condensation formation
- Soot filter for enhanced particle capture
- Electric Peltier cooler with automatic condensate evacuation (model INS: made out of stainless steel)

Operation Safety Features

- Mini display for monitoring and follow up of pump performance, probe heating, wireless transfer quality and indication of error messages
- Toxic particles filter for CO sensor protection
- Temperature trend indication for core stream search
- CO switch off without measurement interruption by exceeding of preset limit value
- Automatic fresh air purging by CO exceeding

Connections

- Connection for external alphanumeric keypad
- USB interface at detachable control module for data transfer
- 2 analogue inputs (option)

Data Processing

- Data logging function
- Data storage on optional MM card
- Control module with alphanumerical entry function
- Bluetooth interface (option)
- WiFi interface (option)
- Storage and illustration of disturbance diagnosis data provided wireless by ecom-AK read-out head
- External keypad for alphanumerical data entry (option)
- Data exchange with ecom PC software

Power Supply

- Battery/Mains power
- External power supply box (option)

Transport

- Aluminium-framed transport case with length-adjustable shoulder carrying strap, fitted with counter-part for instantaneous docking of optional under-case
- Under-case for extra storage (optional). On request additionally with trolley bar.
- Further alternative and special transport cases, see next page.

Dimensions / Weight

- Approx. 500 x 330 x 250 mm (L x H x W)
- Approx. 14 kg (with standard sampling system)



EN 50379-2 and 1st BImSchV approved