# ecom-CL Reliable performance dressed in two different looks.

# To meet your exact needs

The ecom-CL is an all-round starter instrument particulary suitable for gas-fired combustion plants.





## ecom-CL fitted in soft case style

#### **Product Features**

- Up to 3 gas sensors (Longlife)
- ± 100 hPa differential pressure measurement
- Integral thermal printer 58 mm
- Soot measurement via soot pump (option)
- Backlit display
- Electronic condensate monitoring
- 3-chamber tubing, coaxial sampling probe
- T-Room sensor with magnet for easy fixation on metal surfaces
- Emission, temperature and draught measurement without plug connection change
- Internal memory for 300 measurements
- ecom PC software
- Comprehensive accessory program

#### Measured values

- O<sub>2</sub> (0-21%)
- CO (0-4000 ppm)
- Gas temperature (0-500°C)
- Air temperature (0-99°C)
- Pressure (± 100 hPa)
- Differential pressure (± 100 hPa)

#### Options:

- CO extended range (0-10.000 ppm)
- NO measurement (0-5000 ppm)

#### Calculated Values

 ${\rm CO_2}$ ,  ${\rm CO_{(undiluted)}}$ ,  ${\rm NO_x}$ , losses, efficiency (0-120%), dew point, mg/kWh, mg/m³, adjustable  ${\rm O_2}$  ref.

#### Display

- LC display, 70 x 40 mm, max. 8 lines
- Graphic-capable
- Backlit for optimal reading also in the dark

#### Sampling Probe

- Coaxial probe 220 mm
- 3-chamber tubing 2.2 m
- Fixation cone

#### **Measurement Gas Preparation**

- Electronic-monitored condensate trap with dust filter
- Soot filter for enhanced particle capture

#### **Operation Safety Features**

- Temperature trend indication for core stream search
- CO switch off without measurement interruption by exceeding of pre-set limit value
- Automatic fresh air purging by CO exceeding
- Automatic fresh air purging after measurement

#### **Data Processing**

- Internal memory for 300 measurements
- Data exchange with ecom PC software

#### Connections

- Connection for gas leak detector ecom-LSG
- Serial interface for data transfer

#### Power Supply

- Battery/Mains power
- Including charger

#### Transport

Leather-imitated transport bag with powerful rear magnets for instrument positioning on metal surface, with length-adjustable shoulder carrying strap.

Document storage compartment in the back and side storage compartment for charger and small parts.

#### Dimensions / Weight

- Approx. 390 x 250 x 200 mm (L x H x W)
- Approx. 4.6 kg (complete)



EN 50379-2 and 1st BimSchV approved









# ecom-CL fitted in aluminium-framed transport case.



#### **Product Features**

- Up to 3 gas sensors (Longlife)
- ± 100 hPa differential pressure measurement
- Integral thermal printer 58 mm
- Soot measurement via soot pump (option)
- Backlit display
- Electronic condensate monitoring
- 3-chamber tubing, coaxial sampling probe
- T-Room sensor with magnet for easy fixation on metal surfaces
- Emission, temperature and draught measurement without plug connection change
- Internal memory for 300 measurements
- ecom PC software
- Comprehensive accessory program

### Measured values

- O<sub>2</sub> (0-21%)
- CO (0-4000 ppm)
- Gas temperature (0-500°C)
- Air temperature (0-99°C)
- Pressure (± 100 hPa)
- Differential pressure (± 100 hPa)

#### Options:

- CO extended range (0-10.000 ppm)
- NO measurement (0-5000 ppm)

#### Calculated Values

 $CO_2$ ,  $CO_{\text{(undiluted)}}$ ,  $NO_x$ , losses, efficiency (0-120%), dew point, mg/kWh, mg/m³, adjustable  $O_2$  ref.

#### Display

- LC display, 70 x 40 mm, max. 8 lines
- Graphic-capable
- Backlit for optimal reading also in the dark

#### Sampling Probe

- Coaxial probe 220 mm
- 3-chamber tubing 2.2 m
- Fixation cone

## Measurement Gas Preparation

- Electronic-monitored condensate trap with dust filter
- Soot filter for enhanced particle capture

#### **Operation Safety Features**

- Temperature trend indication for core stream search
- CO switch off without measurement interruption by exceeding of pre-set limit value
- Automatic fresh air purging by CO exceeding
- Automatic fresh air purging after measurement
- Optical condensate monitoring
- Longlife sensors

#### Data Processing

- Internal memory for 300 measurements
- Data exchange with ecom PC software

#### Connections

- Connection for gas leak detector ecom-LSG
- Serial interface for data transfer

#### **Power Supply**

- Battery/Mains power
- Including charger

#### Transport

- Aluminium-framed transport case with length-adjustable shoulder carrying strap
- Under-case for extra storage (option)

## Dimensions / Weight

- Approx. 360 x 150 x 250 mm (L x H x W)
- Approx. 5 kg (complete with sampling system)





# ecom-CL Reliable performance dressed in two different looks.

Item no.	Description
1070022	ecom-CL, flue gas analyser with O <sub>2</sub> and CO (H <sub>2</sub> compensated) Longlife sensors, fitted in aluminium-framed case  Complete with sampling probe 220 mm incl. thermocouple, with fixation cone, 3-chamber tubing (2.2 m), T-Room sensor with cable incl. fixing cone with magnet, automatic CO switch off and fresh air purge, electronic condensate monitoring, consumables kit, operation manual on USB drive, calibration certificate –issued after 100% calibration in calibration chamber.  PC software for data management downloadable free of charge from www.rbr.de
56641	Under-case to hard case style, approx 380 x 135 x 100 mm, weight approx. 0.9 kg
101653	Pressure kit for usability check (acc. to TRGI 2008): 3 pcs connection hoses each 1.2 m long with quick-fitting,  1 piece each conic test stopple 1/2" - 3/4" and 3/4" - 1 1/4", 1 piece crosspiece with safety valve, 1 piece compressed air pump for build-up of test pressure in pipe, 1 piece one-pipe counter cap with swivel nut R2" and quick-fittings,  1 piece each high-pressure test stopple 3/8" to 1/2" and 3/8" to 3/4" with quick-fittings, 3 connector parts.  1 piece syringe 100 ml, 1 under case ecom-CL with foam insert for the safe storage of all components
101654	Pressure kit for usability check, preliminary and tightness check (acc. to TRGI 2008): 3 pcs connection hoses each 1.2 m long with quick-fitting, 1 piece each conic test stopple 1/2" - 3/4" and 3/4" - 1 1/4", 1 piece crosspiece with safety valve, 1 piece compressed air pump for build-up of test pressure in pipe, 1 piece one-pipe counter cap with swivel nut R2" and quick-fittings, 1 piece each high-pressure test stopple 3/8" to 1/2" and 3/8" to 3/4" with quick-fittings, 3 connector parts, 1 piece syringe 100 ml, 1 under case ecom-CL with foam insert for the safe storage of all components.1 ecom-UNO, pressure meter, special version ± 1500 hPa with connection cable CL
1070021	ecom-CL, flue gas analyser with O <sub>2</sub> and CO (H <sub>2</sub> -compensated) Longlife sensors, fitted in leather-imitation bag Complete with sampling probe 220 mm incl. thermocouple with fixation cone, 3-chamber tubing (2.2 m), T-Room sensor with cable incl. fixing cone with magnet, automatic CO switch off and fresh air purge, electronic condensate monitoring, consumables kit, operation manual on USB drive, calibration certificate –issued after 100% calibration in calibration chamber.  PC software for data management downloadable free of charge from www.rbr.de
100783	NO measurement (0-5000 ppm). At choice with or without NO <sub>X</sub> calculation.
100233	Tubing for differential pressure measurement (1.5 m)
31000043	Data cable -> PC (RS 232)
51521	Adapter cable USB / RS 232 (requires 3100043)
100222	T-Room stick – H 28 x L 11 mm
10166	T-Room probe – Lenght 260 mm with 3 m cable
50538	Soot pump kit - consisting of soot pump, soot comparison scale, tube of piston grease, socket wrench and 200 soot papers
100965	Universal CO multi-hole probe – telescopic (80 - 280 mm)
100943	Universal O <sub>2</sub> multi-hole probe - telescopic (80 - 280 mm) with three easily exchangaeble sealing plugs for openings from Ø 5 - 25 mm







Magnet fixation (leather-imitation case style)



ecom-CL