

► ECA 450

Combustion analyzer



Technical specifications

Included: ECA 450 analyzer, 30 cm sampling probe, 4.57 m sampling hose

Calculated data (if oxygen <16% & T ° <1200 ° C):

- Combustion efficiency (0.1 to 100%)
- Excess air (1 to 250%)
- Carbon dioxide (CO₂) (0.1% max. Fuel)
- Carbon monoxide (CO) (0 to 99999 ppm)
- NO_x: NO + NO₂ (0 to 4000 ppm)
- NO_x: referenced relative to O₂ % (0 to 17000 ppm)
- CO: referenced relative to O₂ % (0 to 99999 ppm)
- NO: referenced relative to O₂ % (0 to 14900 ppm)
- NO₂: referenced relative to O₂ % (0 to 2100 ppm)
- SO_x: referenced relative to O₂ % (0 to 17000 ppm)

Differential pressure: ± 69 mbar

Power supply: internal rechargeable battery or via the supplied wall adapter

Operation: 8 hours autonomy / 60 seconds preheating

Digital communication: RS232

Ambient temperature: Analyzer: 0 to 40 °C / Probe: 800 °C

Relative humidity: 15 to 90% RH (non-condensing)

Dimensions (L x W x H): 34.3 x 47.0 x 22.9 cm / **Weight:** 11.3 kg

Pre-calibrated fuels: natural gas, coal, 2/4/5/6 petroleum, wood, kerosene, bagasse, propane

Approval: CE

Internal memory: 1000 records

Warranty: 1 year (including sensors)

Product description

The **ECA 450** combustion analyzer measures the combustion efficiency while verifying its environmental compliance. Designed for professionals, it analyzes up to 7 gases simultaneously: oxygen (O₂), carbon oxides (CO and CO₂), nitrogen oxides (NO and NO₂), sulfur oxides (SO₂) and fuels.

The **ECA 450** is an industrial grade analyzer ideal for professionals concerned with combustion efficiency, environmental friendliness, or both. Simultaneous measurements and calculated parameters (combustion efficiency, excess air, etc.) are evaluated to ensure that industrial equipment complies with environmental regulations with the best possible efficiency.

This analyzer is compatible with many applicable regulations such as EPA test methods, EN50379, CTM-030 standards and state/local protocols including SCAQMD. The information collected can be stored in the the device's internal memory or directly transmitted to a computer.

Robustly made, it is integrated into a sturdy suitcase for easy transport. Equipped with a large screen and an integrated printer for traceability and instantaneous storage of measurements, the **ECA 450** is a simple and intuitive tool for the measurement and analysis of combustion parameters.

► The ECA 450 measures and displays

Data	Measure range
Oxygen (O ₂)	0.1 to 20.9 %
Combustion gas temperature	-20 to 1315 °C
Primary air temperature	-20 to 999 °C
Carbon monoxide (CO) compensates for H ₂	0 to 4000 ppm
High concentration carbon monoxide (CO) (option)	4000 to 80000 ppm
Nitric oxide (NO) (option)	0 to 3500 ppm
Nitrogen dioxide (NO ₂) (option)	0 to 500 ppm
Sulfur dioxide (SO ₂) (option)	0 to 4000 ppm
Fuels (option)	0 to 5 %

► Codification

Code	Equipement
0024-7221	ECA 450 - O ₂ , CO (H ₂ compensated)
0024-8400	ECA 450 NO _x - O ₂ , CO (H ₂ compensated), NO, NO ₂
0024-8401	ECA 450 NO _x & SO _x - O ₂ , CO (H ₂ compensated), NO, NO ₂ , SO ₂