



testo **335**

## Combustion Analysis Solutions for Industry

The 335 combustion analyzer delivers superior testing performance on the most demanding applications. It offers wide testing ranges, intuitive operation and rugged portability for maximum versatility. Testo's exclusive sensor technology delivers accurate testing results quickly and reliably, from boilers to process management.

### Combustion testing - at a higher level of performance

#### features:

- **Testing for all applications**
  - Simplified, intuitive, menu driven operations
  - Start-up with the probe-in-stack for greater convenience and safety
  - Bright user-defined display
  - 18 fuels and 10 software enabled user defined fuels
- **Instant information saves valuable time**
  - Fast measurement response including numerous calculated parameters like, CO<sub>2</sub>, corrected NO<sub>x</sub>, efficiency, excess air, dew point, and more
  - "i" button diagnostics and alarms inform you of operational status (i.e. battery, flow rate, water trap, etc.) so you can keep testing
  - Sensor output and calibration records can be displayed or printed for assured accuracy
- **The greatest testing flexibility**
  - Measure oxygen and up to (2) two other user-selected gases: CO, CO<sub>Low</sub>, NO, NO<sub>Low</sub>, NO<sub>2</sub>, SO<sub>2</sub>
  - Pre-calibrated, plug and play sensors eliminate cal gas in all but the most demanding applications - or simply field calibrate for the highest accuracy
- **Finally, high or low range with a portable**
  - Auto dilution expands CO to 50,000 ppm, plus optional NO expansion to 6,000 ppm
  - Or, simply install the low range sensors for critical measurements
- **Powerful software to manage data, setup locations and export data**
  - EasyEmission software, including table and graphics - (USB) - imports customer location data
  - On board data logging to 2-hours
  - Fast print to IR Printer



- O<sub>2</sub>
- CO
- CO<sub>Low</sub>
- NO
- NO<sub>Low</sub>
- NO<sub>2</sub>
- SO<sub>2</sub>
- CO<sub>2</sub> (calculated)
- Eff./ExAir
- Draft/ $\Delta$ P (optional)
- Velocity (optional)
- Mass (optional)



## technical data:

Parameter	Measuring range	Accuracy	Resolution
O <sub>2</sub>	0 to 25 Vol. %	±0.2 Vol. %	0.01 Vol. %
CO (H <sub>2</sub> compensated)	0 to 10,000 ppm	±10 ppm or ±10% of mv (0 to 200 ppm) ±20 ppm or ±5% of mv (201 to 2,000 ppm) ±10 of mv (2,001 to 10,000 ppm)	1 ppm
CO <sub>LOW</sub> (H <sub>2</sub> compensated)	0 to 500 ppm	±2 ppm (0 to 39.9 ppm) ±5% of mv (remaining range)*	0.1 ppm
NO	0 to 3,000 ppm	±5 ppm (0 to 99 ppm) ±5% of mv (100 to 1,999 ppm) ±10% of mv (2,000 to 3,000 ppm)	1 ppm
NO <sub>LOW</sub>	0 to 300 ppm	±2 ppm (0 to 39.9 ppm) ±5% of mv (remaining range)	0.1 ppm
NO <sub>2</sub> **	0 to 500 ppm	±10 ppm (0 to 199 ppm) ±5% of mv (remaining range)	0.1 ppm
SO <sub>2</sub> **	0 to 5,000 ppm	±10 ppm (0 to 99 ppm) ±10% of mv (remaining range)	1 ppm
CO <sub>2</sub> calc.	0 - CO <sub>2</sub> max., 0.1 Vol. %		
Temperature Probe type K (NiCr-Ni)	-40 to +2192°F	0.9°F (32 to 212°F) ±0.5% of rdg. (remaining range)	0.1°F
Differential pressure (draft optional)	-80 to 80" H <sub>2</sub> O	0.2" H <sub>2</sub> O (-20 to 20" H <sub>2</sub> O) ±1.5% of rdg. (remaining range)	0.04" H <sub>2</sub> O
Absolute pressure	240 to 460" H <sub>2</sub> O	4" H <sub>2</sub> O	0.4" H <sub>2</sub> O
Efficiency	0 to 120%	calculated	
Flue gas loss	0 to 99.9%	calculated	

\*Data correspond to 68°F ambient temperature. Additional temperature coefficient 0.25% of mv/K.

\*\*Max. measurement duration of 2 hours should not be exceeded in order to avoid saturation.

## specifications:

### Description:

**Memory:** (data set 1+n), 100 folders, max. 10 folders, max. 200 protocols/site

**Diaphragm pump flow: (1.0 l/min.)**

Hose length: max. 25.5 ft.

(corresponds to two probe hose extensions)

Max. positive pressure/Flue gas: 20" H<sub>2</sub>O

Max. negative pressure/Flue gas: -80" H<sub>2</sub>O

**Weight:** 1.3 lbs.

**Size:** 10" x 3.5" x 2.5"

**Storage temp.:** -4°F to 122°F

**Oper. temp.:** 23°F to 122°F

**Graphics display:** 160 x 240 pixels

**Rechargeable battery:** 3.7V/2.2AH, 6V/1.2A AC

**Material/Housing:** TPE PC

**Protection class:** IP40

### Warranty:

**Analyzer:** 2 years (excluding consumable parts, e.g. meas. cells, filters)

**Rech. batt.:** 1 year

**Meas. cells:** CO, CO<sub>LOW</sub>, NO, NO<sub>LOW</sub>, NO<sub>2</sub>, SO<sub>2</sub>: 1 year

**O<sub>2</sub> meas. cell:** 1.5 years



Pre-calibrated, plug and play sensors



Click on hose extensions



Industrial sampling probes



Complete kit shown (with optional Pelican case)