

Hand Held CO and CO₂ Indoor Air Quality Analyser

it's easy with Kane

KANE100



100

CO
CO₂

Features

- Measures ambient CO and ambient CO₂
- Datalogs up to 255 records with variable sampling time from 1-10 minutes
- Records time and date
- Prints to optional printer using infra-red emitter
- User adjustable alarms for CO and CO₂
- Long life Ni Mh batteries charged in situ with charger
- Internal pump for fast measurements in room air or ducts
- Long sampling hose for 'silent' sampling of high profile / public areas
- Complete with SGAFF probe, spare spigot, fast charger, manual and carry case

Optional Extras

- KMIRP infra-red thermal paper printer
- KANE ImPrint infra-red plain paper printer
- Zero calibration capsule



Header Line 1	
Header Line 2	
AUTOLOG	
DATE	6/6/04
TIME	18:27:08
Start Time	6/6/04
	14:00
Stop Time	6/6/04
	17:59
No of readings	240
.....	
Max CO ₂ ppm	950
	6/6/04
	14:00
Avg CO ₂ ppm	650
Max CO ppm	12
	6/6/04
	15:30
Avg CO ppm	6

Headers can be customised by the user.



Technical Specifications KANE100

Parameter	Resolution	Accuracy *1	Specified Range	Over Range
Gas Measurement *1				
Carbon Monoxide	1ppm	±5 ppm < 100ppm ±5% > 100ppm ±10% > 1000ppm	1000ppm	2000ppm
Carbon Dioxide	1ppm	±20ppm < 400ppm ±5% < 4000ppm ±10% > 4000ppm	200 - 4000 ppm	9999ppm

*1 Using dry gases at Standard Temperature and Pressure (STP) with the instrument not subjected to sudden changes of temperature, position or severe vibration.

Parameter	Description
Dimensions: Weight	1Kg / 2.2lb
Handset	200mm x 45mm x 90mm (7.9" x 1.8" x 3.5")
Probe	L 300mm x Dia 6mm with stainless steel shaft 200mm L 11.8" x Dia 0.25" / 7.8" long stainless steel shaft
Ambient Operating Range	0°C to 45°C (32-104°F) 10% to 90% RH non-condensing
Battery Life	6 hours from full charge
Battery Charger	Input: 100 - 240 V ac 50 - 60 Hz Output: 10V dc @ 800 mA.

Applications at a glance:

CO spillage from boilers into rooms is life threatening and is difficult to detect without a CO analyser.

CO₂ levels above 1000ppm in a building affect our efficiency and concentration and need to be measured to ensure effective building ventilation.

CO₂ emissions from room flued appliances, commercial catering equipment or flueless appliances like gas space heaters or flame effect gas fires can cause drowsiness, moisture and IAQ problems.

CO table:

Concentration	
9 ppm	CO Max prolonged exposure (ASHRAE standard)
35 ppm	CO Max exposure for 8 hr work day (OSHA)
800 ppm	CO Death within 2 to 3 hrs
12,800 ppm	CO Death within 1-3 minutes

CO₂ table:

Concentration	
250 - 350 ppm	Normal background concentration in outdoor ambient air
350 - 1,000 ppm	Concentrations typical of occupied indoor spaces with good air exchange
1,000 - 2,000 ppm	Complaints of drowsiness and poor air
2,000 - 5,000 ppm	Headaches, sleepiness and stagnant, stale, stuffy air. Poor concentration, loss of attention, increased heart rate and slight nausea may also be present
5,000 ppm	Workplace exposure limit (as 8-hour TWA) in most jurisdictions
>40,000 ppm	Exposure may lead to serious oxygen deprivation resulting in permanent brain damage, coma and even death

Your distributor



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Warranty

All Kane International Limited products are warranted for 12 months from the date of purchase. This warranty covers any defects in materials or manufacturing.

Kane International Limited specialise in the design, manufacture and marketing of electronic instruments for monitoring and optimising both energy usage and emissions from energy processes. Our Policy is to continuously develop and improve our products and so we reserve the right to change any part of our product specifications without prior notice.



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NEW Ambient CO and CO₂ Analyser

The KANE100-1 handheld gas analyser measures and logs ambient carbon monoxide (CO) and carbon dioxide (CO₂) levels.

It helps prove flueless gas appliances like space heaters, water heaters and kitchen equipment operate safely. If faulty or inadequately ventilated, these appliances generate high levels of harmful CO and CO₂. With few exceptions, ambient CO levels must be below 10ppm. Flueless appliances also have manufacturer's recommended limits for ambient CO₂ levels.

The KANE100-1 also measures CO and CO₂ for indoor air quality (IAQ) checks. Inadequate ventilation and poorly working appliances will increase CO₂ levels causing drowsiness and condensation. Although some laws allow up to 5,000 ppm CO₂ within an 8 hr period, IAQ professionals recommend no more than 1,000 ppm CO₂ at any time.

The KANE100-1's memory facility stores up to 255 sets of readings which can be logged manually or auto logged at 1 to 10 minute intervals. Results can be printed via an optional infra-red printer including a summary of average and maximum levels reached during the logged period.

The Kane100-1 measures CO up to 1,000ppm using an electrochemical sensor and CO₂ up to 10,000 ppm using a NDIR infra-red sensor. It has an easy to use rotary dial, large backlit display, rechargeable batteries and long sensor life, making it ideal for domestic and commercial service engineers or IAQ specialists to confirm CO & CO₂ levels in homes, offices, factories, schools, other public buildings and commercial kitchens.

The Kane100-1 is fitted with re-chargeable NiMH batteries and is supplied with a charger, protective rubber sleeve with integral magnet, sampling probe with hose, all in a carry case.

