

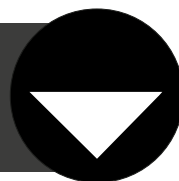
# KANE-EGA4/5



Diagnose engines with unique NDIR technology & test vehicle A/C

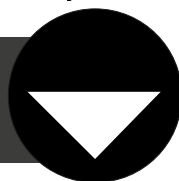


## What do I get?



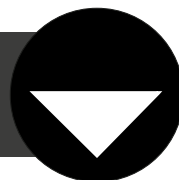
Handheld exhaust analyser for 4 or 5 gases with **KANE LINK™** Your EGA - Your way

## What exhaust gases?



KANE-EGA4	KANE-EGA5
<b>CO</b> 0-10,000ppm & 10%	<b>CO</b> 0-10,000ppm & 10%
<b>CO2</b> 0-20%	<b>CO2</b> 0-20%
<b>HC</b> 0-5,000ppm	<b>HC</b> 0-5,000ppm
<b>O2</b> 0-21%	<b>O2</b> 0-21%
<b>Lambda</b> 0.8-1.2	<b>Lambda</b> 0.8-1.2
	<b>NO</b> 0-5,000ppm

## Which EGA would I like?



### Supplied with:

- **KANE LINK™** wireless module, EP1 emissions probe, CL5 USB Lead, 6 rechargeable batteries, CU12VDC2A21 charger, CA10733/4 in vehicle charger & 14102/2 carry bag



4 Gas



**KANE-EGA4**  
**£2399**

5 Gas



**KANE-EGA5**  
**£2744**



## Battery Powered Exhaust Gas Analyser with Graphic Display

- As KANE-EGA1/2/3 plus:
- Diagnose engine / exhaust / catalytic converter faults quickly
- Unique Non-Dispersive Infrared (NDIR) sensors designed to meet official test standards
- Identify fuel flow, misfire & EVAP problems
- Pre-compliance & roadside emissions tester - local laws may apply
- Measure Lambda & AFR to improve engine efficiency & fuel consumption
- Test vehicles under real world driving conditions
- Take EGA to vehicle, not vehicle to analyser
- Test vehicle A/C & refrigeration systems\*

### Applications

- Real time vehicle / engine testing in workshop & on road
- Instant engine, exhaust system & catalytic converter tests
- Vehicle smog checks, tune ups & diagnostics
- Check repair work with before & after test
- Maintain engines to manufacturer specification
- A/C & refrigeration performance & efficiency

### Measures

- CO 0-10%
- CO<sub>2</sub> 0-20%
- HC 0-5000ppm
- O<sub>2</sub> 0-21%
- NO 0-5000ppm option
- ACR pressure & temp option

### Calculates

- Lambda/AFR 0.8-1.2
- NOx 0-5000ppm optional
- ACR sub cool & super heat

### Fuel Types & Refrigerants

- Petrol / Gasoline
- Diesel
- LPG or CNG
- 40+ refrigerants including R134a & R1234yf

### Features

- Large graphic display
- Unique NDIR sensors for accurate measurements with fast warm up
- Connect to KANE LIVE & 3rd party Apps
- Add optional **KANE LINK™** devices
- Store over 200 tests
- Rechargeable battery with minimum 4 hour life
- Rugged & portable with protective rubber sleeve
- Document test results with optional KANE-IRP3 printer
- 10 year warranty when serviced & recertified by KANE
- Backed by KANE CARE - We promise to never let you down or your money back

See KANE LINK devices on pages 19 & 22



All prices exclude VAT



Exhaust analysis & engine diagnostics



A/C & refrigeration performance & efficiency



Fork lift truck emissions test

### Sensor, exhaust probe & accessory options

NOX 4-2+	NOx upgrade 0-5000ppm for KANE-EGA4	<b>£345</b>
EP2	300mm probe with 6M tubing & in-line particle filter	<b>£185</b>
EP3	230mm motorbike probe with 1.5M tubing	<b>£210</b>
EP4	As EP3 & measures exhaust temperature	<b>£320</b>
EP5	In cab heater probe	<b>£125</b>
KANE-IRP3	Infra Red Printer	<b>£225</b>

\*Optional KANE LINK™ ACR probes available

# ▶ Test engine, exhaust & catalytic convertor

- ▶ Fully portable hand held exhaust gas analyser
- ▶ Ideal for diagnostic, pre-compliance & vehicle servicing
- ▶ Use on any fuel type including Gasoline/Petrol, LPG, CNG & Diesel vehicles
- ▶ Measures CO, CO<sub>2</sub>, HC, O<sub>2</sub> & with NO<sub>x</sub> to 5000ppm option
- ▶ Real time engine exhaust testing in workshop or on road test
- ▶ Before & after testing to verify repairs
- ▶ Monitor & reduce emissions
  - Reduce fuel consumption
  - Improve driveability
  - Protect the environment



## 1 Analyser

### ▶ Check A/C



HVACR R134a			
LP	bar	HP	bar
	2.3		4.6
EV	°C	CO	°C
	3.2		19.1
MT1	°C	MT2	°C
	20.4		5.5
SUPERHEAT	°C	SUBCOOL	°C
	17.2		13.6

Pressure	Good	Bad	Possible Causes
High Pressure Side	17 Bar	5 Bar or less	Compressor Failure Refrigerant Low Blocked Expansion Valve System Blockage
Low Pressure Side	2 Bar	4 Bar or higher	
Temperature	Good	Bad	Possible Causes
Condenser Inlet	60-90 °C	Above 90°C	Lack of Lubrication Condenser Blockage
Condenser Outlet	40-60 °C	Above 90°C	
Compressor	60-90 °C	Above 90°C	Internal Restricted Flow
Evaporator	0-5 °C	Below 0°C	Contaminated Refrigerant

Readings dependant on refrigerant & compressor type (fixed or variable)

Gases Measured		Good	Bad
Carbon Monoxide	CO	Approx. 0.5% or less	More = Too much fuel/rich mixture
Hydrocarbons	HC	Approx. 100ppm or less	More = Misfire
Carbon Dioxide	CO <sub>2</sub>	Approx. 14-15%	Less = Reduced engine efficiency
Oxygen	O <sub>2</sub>	Approx. 0.1 – 1%	More = Too much air/lean mixture
Oxides of Nitrogen	NO <sub>x</sub>	Approx 100-200ppm	More = Engine too hot/lean
Air Fuel Ratio / Lambda	AFR/ $\lambda$	AFR = 14.7:1 $\lambda = 1$	High = Too much air (lean) Low = Too much fuel (rich)

Figures shown may vary depending on vehicle & efficiency of CAT



## 2 Applications

### & refrigeration system



- ▶ Uses optional **KANE LINK™** wireless pressure & temperature probes
- ▶ Test any vehicle AC system including EV's
- ▶ Replaces manifolds & hoses
- ▶ Ideal for a/c diagnostics & repairs
- ▶ 40 Refrigerants including R134A, R1234yf & R410A
- ▶ Subcool & Superheat calculations
- ▶ Readings on EGA & KANE LIVE app