KANE425 Analyser

it's easy with Kane

"Made to Measure" for CORGI Registered Engineers

425

INDEPENDENTLY APPROVED TO **EN50379**

O2

CO

CO2

CO/CO2

Efficiency

Diff. Temp

Diff. Pressure

P 0.000
R 0.0000
CO 00
O2 20.9

On/Off   ✳   Pump   Send

O2/Eff   Ratio
Aux   Prs
Status   Tightness
Menu   Diff Temp
                    Room CO

KANE 425

Optional Extras

- Plug-in gas leak detector
- KMIRP infra-red thermal paper printer
- KANE ImPrint infra-red plain paper printer
- Bluetooth™ module
- NiMH rechargeable batteries
- 220v fast charger
- 12v in-vehicle charger
- Range of temperature probes

Features

- Easy to use rotary switch
- Protective rubber sleeve with magnet for "hands free" use
- Multi-fuel: Natural Gas, Propane, Butane, LPG, Light Oils (28/35 sec), and Wood Pellets
- High accuracy manometer
- Differential thermometer
- "Send" button for instant printout and logging
- Separate reports for:
  Combustion
  Pressure
  Let-by and Tightness
  Temperature
  CO build up
- Battery life typically 12+ hours
- Designed to meet BS7967
- 5 year extended warranty if serviced annually by Kane

Infra-red printer emitter

P 0.000
R 0.0000
CO 00
O2 20.9

KANE 425

KANE®

```
K425  1.0
YOUR COMPANY NAME &
PHONE NUMBER HERE


TEST        10

DATE     15/05/06
TIME     12:00:08


COMBUSTION
...................

FUEL      NAT GAS

O2 %         5.4
CO2 %        8.8
CO  ppm       12
FLUE  °C     55.1
INLT  °C     17.2
NETT  °C     37.9

EFF (C)     98.3
LOSSES       1.7
XAIR %      34.8

CO/CO2    0.0001

PRS  mBAR   0.00


...................
Customer

...................
Appliance

...................
Ref.

...................
```

Combustion Analyser (#1)

- Select "Ratio" on the rotary switch to view current fuel, CO/CO_2 ratio, CO, and CO_2
- Select "O_2/Eff" to view O_2, temperatures and efficiency
- Select "Aux" to view any 4 parameters, user selectable
- Measures O_2, CO, inlet and flue temperatures
- Calculates CO_2, CO/CO_2 ratio, excess air, losses and combustion efficiency, (nett, gross or condensing)
- Multi fuel - Natural gas, Propane, Butane, LPG, Light Oils (28/35 sec) and Wood Pellets
- Readings can be printed via an infra-red printer, (see printout example)
- Memory stores up to 99 combustion tests

CO Meter (#4)

Calibrate the analyser in fresh air to set the CO sensor to zero

- Select "Ratio" or "Aux" to check the ambient CO level in a room
- Select "Room CO" to perform a 15 minute CO test
- The CO level is logged at 1 minute intervals
- "Room CO" tests are automatically stored in the memory
- Tests can be printed via an infra-red printer, (see printout example)
- Memory stores up to 20 "Room CO" tests

```
K425  1.0
YOUR COMPANY NAME &
PHONE NUMBER HERE

ROOM CO TEST
...................

LOG           01
TIME 12:50 15/05/06

TEST      CO ppm
0           00
1           00
2           10
3           04
4           01
5           00
6           00
7           10
8           03
9           00
10          00
11          00
12          07
13          11
14          02
15          00
...................
MAXIMUM CO    11

...................
Customer

...................
Appliance

...................
Ref.

...................
```

Gas Leak Detector (#5), *optional*

- Plug-in, handheld unit with the sensor at the tip of a flexible shaft
- LED's and a variable buzzer enable the user to pinpoint a gas leak
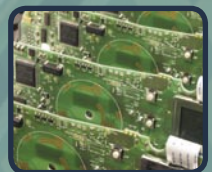- Can detect leaks down to 50ppm of methane / natural gas

Differential Pressure Meter (#2)

- **Select "Prs"** on the rotary switch for high accuracy single or differential pressure readings

- Range ± 80mBar, maximum resolution 0.001mBar
Ideal for difficult applications such as flue draught

- Readings can be smoothed to damp out pressure pulsing
Ideal for setting air/gas ratio valves

- Display includes a clock for manual timing

- Readings can be printed via an infra-red printer, (see printout example)

- Memory stores up to 20 pressure tests

- **Select "Tightness"** to perform a let-by test and stabilisation/tightness test

- The let-by period defaults to 1 minute
The stabilisation period defaults to 1 minute
The tightness test period defaults to 2 minutes
All 3 times can be adjusted by the user

- Tests are automatically stored in the memory

- Tests can be printed via an infra-red printer, (see printout example)

- Memory stores up to 20 "Tightness" tests

Differential Thermometer (#3)

- Select "Diff Temp" to view flow (T1), return (T2) and differential (ΔT) temperatures

- Temperature probes are available to measure air, liquid and surface (pipe) temperatures

- Ideal for Benchmark log book

- Readings can be printed via an infra-red printer, (see printout example)

- Memory stores up to 20 differential temperature tests

Torch Light (#6)

- Never got a torch when you need one? You have now!

- The KANE425 has a backlit display and an inbuilt LED torch

```
K425  1.0
YOUR COMPANY NAME &
PHONE NUMBER HERE
PRESSURE
...................
TIME  12:56 15/05/06
PRS   mBAR   -0.037

...................
Customer
...................
Appliance
...................
Ref.
...................
```

```
K425  1.0
YOUR COMPANY NAME &
PHONE NUMBER HERE

LOG           04
TIME  11:53 15/05/06

Let By Test
...................
PRS_1 mBAR    10.12
PRS_2 mBAR    10.11
LET BY   MINS  1:00

Tightness Test
...................
PRS_1 mBAR    20.12
PRS_2 mBAR    20.10
ΔPRS  mBAR   -0.02
STABIL'N MINS  1:00
TIGHTN'S MINS  2:00

...................
Customer
...................
Appliance
...................
Ref.
...................
```

```
K425  1.0
YOUR COMPANY NAME &
PHONE NUMBER HERE
DIFF TEMP
...................
LOG           03
TIME  12:10 15/05/06

T1    °C      60.1
T2    °C      47.0
ΔT    °C      13.1

...................
Customer
...................
Appliance
...................
Ref.
...................
```

Parameter	Range	Resolution	Accuracy
Temp Measurement			
Flue Temperature	0-600°C *(0-1200°C with special probe)*	0.1°C	$\pm$1.5°C or $\pm$1% reading
Inlet Temperature			
(Internal sensor)	0-50°C	0.1°C	$\pm$1.0°C
(External sensor)	0-600°C	0.1°C	$\pm$1.5°C or $\pm$1% reading
Gas Measurement			
Oxygen	0-21%	0.1%	$\pm$0.2% [1]
Carbon Dioxide[2]	0-30%	0.1%	$\pm$0.3%
Carbon monoxide	0-2,000ppm nom 4,000ppm max for 15 mins	1ppm	$\pm$2ppm <20ppm[1] $\pm$5ppm <100ppm $\pm$5% reading >100 ppm
Calculated values [3]			
Efficiency	0-99.9%	0.1%	
Excess Air	0-250%	0.1%	
CO/CO$_2$ ratio	0-0.9999	0.0001	
Pressure (differential)			
Nominal range $\pm$80 mbar *(Maximum over range without damage to sensor is $\pm$400 mbar)*	$\pm$0.2 mbar $\pm$1 mbar $\pm$80 mbar	0.001 mbar to 24.999 bar then 0.01 mbar	$\pm$0.005 mbar $\pm$0.03 mbar $\pm$3% of reading

[1] Using dry gases at STP

[2] Derived from O$_2$ measurement

[3] All calculations in accordance with BS EN50379 approval.

Pre-programmed Fuels	Natural gas, Propane, Butane, LPG, Light Oils (28/35 sec), Wood Pellets
Storage Capacity	99 Combustion tests 20 Pressure tests 20 Tightness tests 20 Temperature tests 20 Room CO tests
Ambient Operating Range	0°C to +45°C 10% to 90% RH non-condensing
Battery Type / Life	4 AA cells >12 hours using Alkaline AA cells
Chargers (optional)	220v charger, for NiMH batteries only 12v in vehicle charger, for NiMH batteries only
Dimensions Weight: Handset: Standard Probe:	0.8kg handset with protective cover 200 x 45 x 90mm 300mm long including handle. 6mm diameter x 240mm long stainless steel shaft with 3m long neoprene hose. Type K thermocouple.

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

🇬🇧 UK Office
Keison Products,
P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.
Tel: +44 (0)330 088 0560
Fax: +44 (0)1245 808399
Email: sales@keison.co.uk