

# Equipment Listed on Behalf of CoGDEM

## Carbon Monoxide Alarms

### Introduction

Carbon Monoxide (CO) is a poisonous gas with no taste, no colour and no smell. It is produced by the incomplete combustion of carbon based fuels such as gas, oil and solid fuels including wood. Tragically each year people die because of carbon monoxide poisoning and others are made ill.

The causes of these deaths usually relate to the incorrect installation of the heater, lack of maintenance of the appliance and its chimney or to inadequate air supply for the appliance to function properly. Changes to the building regulations which came into effect in October 2010 mean that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292 and from the alarm manufacturer's instructions.

Carbon monoxide alarms are readily available and the British Standards Institution has published a Standard (BS EN 50291) for electrical apparatus designed to detect carbon monoxide in domestic premises and to provide an alarm to alert the householder to its presence. In this section of the Guide HETAS list a range of these devices supplied by members of the Council of Gas Detection and Environmental Monitoring (CoGDEM), which are claimed, or certified, to be manufactured to BS EN 50291 and which are suitable for use with solid fuel heating appliances.

It should be understood by purchasers and specifiers that claims recorded in the Approval Status area as "Manufacturer claims to BS EN 50291" is a claim of the manufacturer alone and has not been endorsed by HETAS or any Independent Certification/Approval body. Where the claim in the Approval status column quotes a BSI Kitemark, this is an indication that the product has been independently assessed by the BSI which is one of the UK bodies entitled to engage in third party certification and product monitoring.

Purchasers and specifiers should use BS EN 50291 as a basis for product selection. The older standard, BS7860, was withdrawn in 2006. CoGDEM does not recommend the use of "colour change" indicator cards, as these do not have an audible alarm and they have very limited lifetimes.

**It is now mandatory to fit a CO alarm whenever a new or replacement solid fuel appliance is installed in a dwelling. When choosing an alarm for this purpose or to upgrade an existing installation to current regulations please refer to *Approved Document J*; October 2010: paragraphs 2.34 to 2.36. This alarm must be a permanently installed type, rather than a portable type, and should incorporate self-test and audible alert if the battery or sensor develop a fault.**

It is important that the alarm manufacturer's installation and operating instructions are strictly conformed to at all times. Again the British and European Standard (BS EN 50292) has been produced as a guide on the selection, installation, use and maintenance of these detectors/alarms and should be adhered to.

**No safety device is infallible and should never be taken as a substitute for correct initial appliance installation or for regular and effective chimney sweeping and proper appliance operation and maintenance by a HETAS Registered Installer.**

**When an alarm is activated or if fume emission from an appliance is otherwise detected the flame should be extinguished, the room evacuated and the doors and windows opened. The appliance must not be used again until checked by a HETAS Registered Installer and shown to be in safe working order.**

Further information on CoGDEM (The Council of Gas Detection and Environmental Monitoring) is available from:

CoGDEM, Unit 9, Knowl Piece Business Centre, Wilbury Way, Hitchin, Herts, SG4 0TY











01462 434322 Fax: 01462 434488 Helpline: 0800 1694 457



admin@cogdem.org.uk






www.cogdem.org.uk
















## Carbon Monoxide Alarms












Product Name	Approval Status	Product Image
<b>Ei Electronics Ltd</b> Shannon, Co. Clare, Ireland.		0151 298 158 00 353 61 471053/471140 eielectronics@eielectronics.ie www.eielectronics.com
<b>Aico Ei 261ENRC</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012. Meets the requirements of the Building Regulations in England, Wales, Scotland and Northern Ireland.	
<b>Manufacturer's Remarks;</b> Mains Powered Carbon Monoxide Alarm with rechargeable lithium back-up, interconnect and AudioLINK Alarm Data Extraction ( also available with Digital Display Ei261DENRC )		
<b>Aico Ei262</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012. Meets the requirements of the Building Regulations in England, Wales, Scotland and Northern Ireland.	
<b>Manufacturer's Remarks;</b> Mains Powered Carbon Monoxide Alarm with rechargeable lithium back-up, Radio LINK RF interconnect and AudioLINK Alarm Data Extraction		
<b>Aico Ei 225EN</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012	
<b>Manufacturer's Remarks;</b> Mains Powered Carbon Monoxide Alarm		
<b>Ei 204EN</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012	
<b>Manufacturer's Remarks;</b> Alkaline Battery Powered Carbon Monoxide Alarm. Powered for five years.		
<b>Ei207</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012 BSI Kitemarked. BS EN 50291-2:2010	
<b>Manufacturer's Remarks;</b> Alkaline Battery Powered Carbon Monoxide Alarm. with CO memory function. Powered for five years.		
<b>Ei207D</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012 BSI Kitemarked. BS EN 50291-2:2010	
<b>Manufacturer's Remarks;</b> Battery Powered Carbon Monoxide Alarm with CO memory function and Digital Display. Display shows from Very Low level of 10 ppm upwards. Ideal for homes with very young children, the elderly and people with impaired lung function.		
<b>Aico Ei208</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012 and BS EN 50291-2:2010. Meets the requirements of the Building Regulations in England, Wales, Scotland and Northern Ireland	
<b>Manufacturer's Remarks;</b> Battery Powered Carbon Monoxide Alarm with sealed-in 10 yr life lithium cell and AudioLINK Alarm Data Extraction.		
<b>Aico Ei208W</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012 and BS EN 50291-2:2010. Meets the requirements of the Building Regulations in England, Wales, Scotland and Northern Ireland.	
<b>Manufacturer's Remarks;</b> Battery Powered Carbon Monoxide Alarm. Sealed-in 10 yr life lithium cell and, RadioLINK RF interconnect option and AudioLINK Alarm Data Extraction		
<b>Aico Ei208DW</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012 and BS EN 50291-2:2010. Meets the requirements of the Building Regulations in England, Wales, Scotland and Northern Ireland.	
<b>Manufacturer's Remarks;</b> Battery Powered Carbon Monoxide Alarm with Digital Display, sealed-in 10 yr life lithium cell, RadioLINK RF interconnect option and AudioLINK Alarm Data Extraction		








Product Name	Approval Status	Product Image
<b>Ei Electronics Ltd</b> Shannon, Co. Clare, Ireland.		0151 298 158 00 353 61 471053/471140 eielectronics@eielectronics.ie www.eielectronics.com
<b>Aico Ei208WRF</b>	BSI Kitemarked. BS EN 50291-1:2010 + A1:2012 and BS EN 50291-2:2010. Meets the requirements of the Building Regulations in England, Wales, Scotland and Northern Ireland	
<b>Manufacturer's Remarks;</b> RadioliNK RF Interconnect Battery Powered Carbon Monoxide Alarm with sealed-in 10 yr life lithium cell and AudioLiNK Alarm Data Extraction		

<b>FireHawk - FireBlitz Extinguisher Ltd</b> 15/17 Manford Industrial Estate, Manor Road, Erith, Kent DA8 2AJ		01322 342238 sales@fireblitz.co.uk www.fireblitz.co.uk
<b>FireHawk CO5B</b>	BSI Kitemark to BS EN50291:2010. Meets the requirements of Part J of the Building Regulations and regulations in Wales, NI and Scotland..	
<b>Manufacturer's Remarks;</b> 5 year life battery powered CO alarm. Fully sealed battery designed to power for life of alarm. Warranty - 5 years, automatic sensor test, alarm silence, low battery warning & versatile mounting system.		
<b>FireHawk CO7B</b>	BSI Kitemark to BS EN50291:2010. Meets the requirements of Part J of the Building Regulations and regulations in Wales, NI and Scotland..	
<b>Manufacturer's Remarks;</b> 7 year life battery powered CO alarm. Fully sealed battery designed to power for life of alarm. Warranty - 7 years, automatic sensor test, alarm silence, low battery warning & versatile mounting system.		
<b>FireHawk CO7BD</b>	BSI Kitemark to BS EN50291:2010. Meets the requirements of Part J of the Building Regulations and regulations in Wales, NI and Scotland..	
<b>Manufacturer's Remarks;</b> 7 year life battery powered CO alarm with digital display. Fully sealed battery designed for life of alarm. Warranty - 7 years, automatic sensor test, alarm silence, low battery warning & versatile mounting system.		
<b>FireHawk CO7-10Y</b>	BSI Kitemark to BS EN50291:2010. Meets the requirements of Part J of the Building Regulations and regulations in Wales, NI and Scotland	
<b>Manufacturer's Remarks;</b> 10 year life battery powered CO alarm . Fully sealed battery designed for life of alarm. Warranty - 10 years, automatic sensor test, alarm silence, low battery warning & versatile mounting system.		

<b>Honeywell Analytics (Domestic Products)</b> 4 Stinsford Road, Nuffield Ind. Est., Poole Dorset BH17 ORZ.		01202 645587 adrian.keats@honeywell.com www.homesafety.honeywell.com
<b>XC70-EN</b>	Approved and Kitemarked to EN50291:2010.(-1 & -2)	
<b>Manufacturer's Remarks;</b> Self contained (sealed for life batteries) carbon monoxide alarm. Completely tamper proof. Fully comprehensive 7 year maintenance free operational life & guarantee. Additional features include memory function, low level monitoring mode, early warning "Ventilate" function, low volume test mode and upgradeable to wireless interconnection options. Also has full data download capability (further details on request).		

Product Name	Approval Status	Product Image
<p><b>Honeywell Analytics (Domestic Products)</b>                      4 Stinsford Road,                      Nuffield Ind. Est., Poole                      Dorset                      BH17 ORZ.</p>		
		01202 645587 adrian.keats@honeywell.com www.homesafety.honeywell.com
XC100-EN	Approved and Kitemarked to EN50291:2010 (-1 & -2).	
<p><b>Manufacturer's Remarks;</b> All the same features and benefits of the XC70-EN model with the addition of a fully comprehensive 10 year operational life and guarantee and the unique Action Text feature which gives a clear indication to the user of what to do in the event of a full alarm.</p>		
XC100D-EN	Approved and Kitemarked to EN50291:2010. (-1 & -2)	
<p><b>Manufacturer's Remarks;</b> All the same features and benefits of the XC100-EN model with the addition of a multi function digital display which can provide a range of information including, CO alarm concentrations, peak level indicator/memory, other units connected wirelessly and percentage CO levels when in low level monitoring mode.</p>		
<p><b>Kidde Safety Europe Ltd</b>                      Mathisen Way, Poyle Road,                      Colnbrook, Berkshire,                      SL3 0HB</p>		
		0800 917 0722 www.kiddesafetyeurope.co.uk
Lifesaver 5CO	Kitemarked to EN50291:2010	
<p><b>Manufacturer's Remarks;</b> Battery operated CO alarm. Easy to set-up and use. Wall-mounting or free-standing options. End-of-life warning signal. 7 year warranty.</p>		
7CO	Kitemarked to EN50291-1:2010 & EN50291-2:2010	
<p><b>Manufacturer's Remarks;</b> Battery operated CO alarm. Easy to set-up and use. Wall-mounting or free-standing options. End-of-life warning signal after 10 years. Certified to EN 50291-2 for use in boats and caravans. 10 year warranty.</p>		
7DCO	Kitemarked to EN50291-1:2010 & EN50291-2:2010	
<p><b>Manufacturer's Remarks;</b> Battery operated CO alarm. Easy to set-up and use. Wall-mounting or free-standing options. End-of-life warning signal after 10 years. Includes an LCD digital display screen that shows CO levels detected. Certified to EN 50291-2 for use in boats and caravans. 10 year warranty.</p>		
8LLCO	Kitemarked to EN50291:2010	
<p><b>Manufacturer's Remarks;</b> 10-year CO alarm with sealed-in non-removable battery to last the full 10 year alarm life. Easy to set-up and use. Wall-mounting or free-standing options. End-of-life warning signal. 10 year warranty.</p>		
8LLDCO	Kitemarked to EN50291:2010	
<p><b>Manufacturer's Remarks;</b> 10-year CO alarm with sealed-in non-removable battery to last the full 10 year alarm life. Includes and LCD digital display screen that shows CO levels detected and can also recall peak level detected. Easy to set-up and use. Wall-mounting or free-standing options. End-of-life warning signal. 10 year warranty.</p>		
10LLCO	Kitemarked to EN50291-1:2010	
<p><b>Manufacturer's Remarks;</b> 10-year CO alarm with sealed-in non-removable battery to last the full 10 year alarm life. 3 LED's (power, alarm &amp; fault). Easy to set-up and use. Wall-mounting or free-standing options. LED and audible end of life warning signal. 10 year warranty.</p>		
10LLDCO	Kitemarked to EN50291-1:2010	
<p><b>Manufacturer's Remarks;</b> 10-year CO alarm with sealed-in non-removable battery to last the full 10 year alarm life. 3 LED's (power, alarm &amp; fault). Includes an LCD digital display screen that shows CO levels and can also recall peak level detected. Easy to set-up and use. Wall-mounting or free-standing options. LED and audible end of life warning signal. 10 year warranty.</p>		

Product Name	Approval Status	Product Image
<div style="display: flex; justify-content: space-between;"> <div data-bbox="167 203 406 300"> <p><b>Kidde Safety Europe Ltd</b> Mathisen Way, Poyle Road, Colnbrook, Berkshire, SL3 0HB</p> </div> <div data-bbox="576 190 948 313">  </div> <div data-bbox="1123 226 1398 277"> <p>0800 917 0722 www.kiddesafetyeurope.co.uk</p> </div> </div>		
4MCO	Kitemarked to EN50291:2010	
<p><b>Manufacturer's Remarks;</b> Hard wired CO alarm, with Smart Interconnect to Kidde Slick hard wired smoke &amp; heat alarms. Rechargeable lithium back up. Test &amp; Reset Buttons. Wall or ceiling-mount. 6 Year warranty.</p>		
4MDCO	Kitemarked to EN50291:2010	
<p><b>Manufacturer's Remarks;</b> Hard wired CO alarm, with Smart Interconnect to Kidde Slick® hard wired smoke &amp; heat alarms. Digital display &amp; peak level/memory. Rechargeable lithium back up. Test &amp; Reset Buttons. Wall or ceiling-mount. 6 Year warranty.</p>		
10SCO	Kitemarked to EN50291: 2010	
<p><b>Manufacturer's Remarks;</b> This battery-powered combination alarm is certified to provide detection from both smoke and carbon monoxide. Features include a voice warning which tells you which danger has been detected, and also a front-loading battery compartment for added convenience. 10 year warranty.</p>		
<div style="display: flex; justify-content: space-between;"> <div data-bbox="178 898 394 999"> <p><b>Smart Compliance Ltd</b> Belgrave Court Rosehall Rd Bellshill, ML4 3NR</p> </div> <div data-bbox="525 891 1023 992">  </div> <div data-bbox="1139 898 1409 999"> <p>01698 840425 01698 844072 info@smart-compliance.co.uk www.smart-compliance.co.uk</p> </div> </div>		
CO- 01	Kitemark to BS EN 50291-1:2010	
<p><b>Manufacturer's Remarks;</b> Battery operated CO alarm. 5 year guarantee Easy installation. Self- checks and communicates to mobile device on a weekly basis. Communicates with multiple mobile devices in event of CO exposure. Web Portal access to full housing stock, per individual postal address. Retail and trade packs available.</p>		
<div style="display: flex; justify-content: space-between;"> <div data-bbox="122 1247 515 1400"> <p><b>Sprue Safety Products Ltd - FireAngel Ltd</b> Vanguard Centre, Sir William Lyons Road, Coventry, CV4 7EZ 02476 323232 info@fireangel.co.uk www.fireangel.co.uk</p> </div> <div data-bbox="568 1254 970 1391">  </div> <div data-bbox="1013 1234 1461 1411"> <p><b>Sprue Safety Products Ltd - BRK Brands Europe</b> Unit 6, Carter Court, Davy Way, Waterwells Business Park, Quedgeley, Gloucester GL2 2DE 01452 887570 info@brkdicon.co.uk www.brkdicon.co.uk www.firstalert.eu</p> </div> </div>		
First Alert CO-FA-9B	Kitemark to BS EN 50291-1,2:2010	
<p><b>Manufacturer's Remarks;</b> Battery powered 7 year life carbon monoxide alarm. Large test and reset button makes testing easy. Automatic self diagnostic check. Includes end of life indication. Retail PET pack. 7 year warranty.</p>		
AngelEye CO-AE-9B	Kitemark to BS EN 50291-1,2:2010	
<p><b>Manufacturer's Remarks;</b> Battery powered 7 year life carbon monoxide alarm. Large test and reset button makes testing easy. Automatic self diagnostic check. Includes end of life indication. Retail PET pack. 7 year warranty.</p>		
FireAngel SC05	Kitemark to BS EN 14604:2005 Kitemark to BS EN 50291-1:2010	
<p><b>Manufacturer's Remarks;</b> Battery powered 7 year life combination alarm detecting smoke and carbon monoxide. 2 separate loud alarms and indicator lights for easy recognition. Includes end of life indication. Retail PET packs available. 7 year warranty.</p>		
First Alert SC05	Kitemark to BS EN 14604:2005 Kitemark to BS EN 50291-1:2010	
<p><b>Manufacturer's Remarks;</b> Battery powered 7 year life combination alarm detecting smoke and carbon monoxide. 2 separate loud alarms and indicator lights for easy recognition. Includes end of life indication. Retail PET packs available. 7 year warranty.</p>		

Product Name	Approval Status	Product Image
<p><b>Sprue Safety Products Ltd - FireAngel Ltd</b>                      Vanguard Centre, Sir William Lyons Road,                      Coventry, CV4 7EZ                      02476 323232                      info@fireangel.co.uk                      www.fireangel.co.uk</p>	 <p><b>sprue</b></p>	<p><b>Sprue Safety Products Ltd - BRK Brands Europe</b>                      Unit 6, Carter Court, Davy Way, Waterwells                      Business Park, Quedgeley, Gloucester GL2 2DE                      01452 887570                      info@brkdicon.co.uk                      www.brkdicon.co.uk                      www.firstalert.eu</p>
<p><b>FireAngel CO-9X</b></p>	<p>BSI Kitemark. BS EN 50291-1:2010 +A1:2012                      BS EN 50291-2:2010 Certified. Meets the requirements of the Building                      Regulations in England, Wales, Scotland and Northern Ireland..</p>	
<p><b>Manufacturer's Remarks;</b> 7 year sealed for life carbon monoxide alarm. Large test and reset button makes testing easy. Automatic self diagnostic check. Triple LED display shows power, fault and alarm. Retail and trade packs available. 7 year warranty.</p>		
<p><b>FireAngel CO-9B</b></p>	<p>BSI Kitemark. BS EN 50291-1:2010 +A1:2012                      BS EN 50291-2:2010 Certified.</p>	
<p><b>Manufacturer's Remarks;</b> Battery powered 7 year life carbon monoxide alarm. Large test &amp; reset button makes testing easy. Automatic self diagnostic check. Retail and trade packs available. 7 year warranty.</p>		
<p><b>FireAngel CO-9D</b></p>	<p>BSI Kitemark. BS EN 50291-1:2010 +A1:2012                      BS EN 50291-2:2010 (Excluding boats) Certified. Meets the requirements of the                      Building Regulations in England, Wales, Scotland and Northern Ireland..</p>	
<p><b>Manufacturer's Remarks;</b> 7 year sealed-for-life carbon monoxide alarm. Digital LCD display shows low levels of CO down to 10ppm and also peak readings over the previous 4 weeks. Automatic self diagnostic check. Integrated digital thermometer. Switchable between temperature and CO modes. Retail and trade packs available. 7 year warranty.</p>		
<p><b>FireAngel CO-9X-10</b></p>	<p>Kitemark to BS EN 50291-1:2010 +A1:2012                      BS EN 50291-2:2010. Meets the requirements of the Building                      Regulations in England, Wales, Scotland and Northern Ireland.</p>	
<p><b>Manufacturer's Remarks;</b> 10 year sealed for life battery powered carbon monoxide alarm. Large test and reset button makes testing easy. Automatic self diagnostic check. Triple LED display shows power, fault and alarm. Retail and trade packs available. 10 year warranty.</p>		
<p><b>FireAngel W2-CO-10XQ</b>  <b>Sona WCOB-SN-1</b></p>	<p>Kitemark to BS EN 50291-1:2010 +A1:2012                      BS EN 50291-2:2010. Meets the requirements of the Building                      Regulations in England, Wales, Scotland and Northern Ireland.</p>	
<p><b>Manufacturer's Remarks;</b> 10 year sealed for life battery powered carbon monoxide alarm with wireless interconnect . Large test and reset button makes testing easy. Automatic self diagnostic check. Triple LED display shows power, fault and alarm. Retail (FireAngel - pictured above right) and trade packs (Sona - pictured below right) available. 5 year warranty.</p>		

# Flue Gas & Ambient Air CO Analysers, Air Flow Meters

You should use a Flue Gas Analyser for two purposes:

## Appliance Testing

A Flue Gas Analyser measures the levels of constituents of flue gases. You place the probe in the chimney or appliance exhaust and see what levels of Oxygen (O<sub>2</sub>), Carbon Monoxide (CO), Carbon Dioxide (CO<sub>2</sub>) and flue gas temperature are present. They are no more complicated to operate than a video camera and behave as if they are your eyes inside the appliance. Some analysers offer additional information such as boiler efficiency, data logging, differential pressure and other gas measurements. They should also offer the option to either print or store the measurements for later review.

Flue gas analysers usually display a CO/CO<sub>2</sub> ratio. This shows the ratio of carbon monoxide and carbon dioxide in the exit flue (chimney) of the appliance. The levels which indicate the correct operation of an appliance may vary widely with the fuel burned and appliance type. Reference should therefore be made to the instrument manufacturer's instructions.

## Ambient Air Monitoring

A Flue Gas Analyser also measures the levels of constituents of room air. This information is invaluable, for example, when attempting to find out if there is CO leaking from an appliance or pinpointing why a CO alarm is being triggered.




An ambient air CO analyser will also monitor ambient levels of CO in any room. This is carried out by first switching the analyser on in fresh, outdoor air to set its zero value, following the manufacturer's instructions. The analyser should only then be taken into the room to be monitored.



If the analyser measures CO levels above 9 ppm, an investigation should be made. Any reading over 35 ppm should prompt immediate action, such as opening all windows and doors, switching off and isolating any appliances present and leaving the room.




A subsequent room retest should be made after each appliance has been checked.

Do not forget that CO levels in rooms can occur from being adjacent to a busy road, car park or garage, as well as from smoking, outdoor barbecues, adjacent properties sharing the same flue systems etc. These factors need to be taken into account when determining whether there is a problem and expert help should be sought. Also national regulations that apply should be consulted when performing appliance installation and servicing.

Finally, whilst every effort is made to ensure accuracy, this document is always subject to revision as more information becomes available on CO sources, levels and appropriate testing methods. Consequently, neither HETAS nor CoGDEN can be held liable for any information given above.

Product Name	Approval Status	Product Image
<b>Anton Industrial Services Ltd</b> Unit 6 Greenhill House 26 Greenhill Crescent Watford Business Park Watford WD18 8JA		0870 428 0075 0870 428 0076 sales@anton-group.com www.anton-group.com
<b>Sprint eVo1</b>	Complies with BS7967:2010 Parts 1 to 5 & EN50379:2012 Parts 1 & 3	
<b>Manufacturer's Remarks:</b> Improved smaller ergonomic designed Sprint flue gas analyser with over moulded protection; enhanced simple to use, intuitive menu driven software. CO, CO <sub>2</sub> , CO/CO <sub>2</sub> ratio, O <sub>2</sub> , XS air, temperature, efficiency. Timed CO build up tests (BS7967) with appliance selection. Flow & return temperature. Li-ion rechargeable battery (no memory loss). Simplified purge structure, enabling quick use of non-pumped tests, saving battery life. Improved high contrast graphic screen, multi viewing angle and temperature compensated. 5 year limited warranty (2 years on sensors)		
<b>Sprint eVo2</b>	Complies with BS7967:2010 Parts 1 to 5 & EN50379:2012 Parts 1 & 3	
<b>Manufacturer's Remarks:</b> As eVo1 but also includes timed let by/tightness test (IGE/Up/1b) (0.01 resolution up to 199.99 mBar). Draught / differential pressure measurement with timer. Operating / working pressure report. PC lite software to enable USB/PC communication with personalised PDF reports. Optional gooseneck gas leak detection with searchlight.		

Product Name	Approval Status	Product Image
<b>Anton Industrial Services Ltd</b> Unit 6 Greenhill House 26 Greenhill Crescent Watford Business Park Watford WD18 8JA		0870 428 0075 0870 428 0076 sales@anton-group.com www.anton-group.com
<b>Sprint eVo3</b>	Complies with BS7967:2010 Parts 1 to 5 & EN50379:2012 Parts 1 & 3	
<b>Manufacturer's Remarks;</b> As eVo2 with Bluetooth, providing seamless interaction with Anton's free smart new Sprint Mobile app. Sprint Mobile enables flue gas reports to be created and sent directly to the customer without the need for printing. There are ventilation calculators too and quotes, invoices and receipts can also be created and emailed to customers.		
<b>APM 130</b>	-	
<b>Manufacturer's Remarks;</b> 0.01 resolution up to 19.99 mBar then over to 0.1 resolution. Measurement range -40 mBar to +130 mBar. Backlit. Differential pressure measurement. Data hold facility. Auto power offer 12 mins (optional). Simple push button operation. Protective boot with tilt stand. Water resistant (IP67). Domestic tightness testing (IGE/Up/1b) with timer. Standard hose connections.		
<b>AGM 50</b>	-	
<b>Manufacturer's Remarks;</b> Hand held combustible gas leak detector, with gooseneck probe with LED in tip to assist in poorly lit spaces. Adjustable tick rate and sensitivity, audible and visual alarms. Batteries included and battery indication. Protective rubber boot around instrument.		
<b>Clip CO</b>	Intrinsically Safe to EN 60079-11	
<b>Manufacturer's Remarks;</b> Personal CO alarm with audible, visual and vibrate alarm at 30 & 100 ppm. Sensor range 0-300 ppm. Protects against CO hazards for 2 years from point of activation. Maintenance free operation. On screen life duration countdown. Self-test assures user of operation. Ingress protection IP 66 & IP67. 76g and 85 x 50 x 28mm with pocket clip.		
<b>IAQ 8494</b>	Compliant with BS 8494	
<b>Manufacturer's Remarks;</b> Offers the ability to review both ambient temperature as well as direct CO <sub>2</sub> 0-9,999 ppm, CO <sub>2</sub> NDIR sensor (anticipated sensor life 15 years). Adjustable audible alarm, min / max levels. Time weighted averages, short time exposure limit. Backlit for confined spaces. Auto power off. 3 year warranty. Rugged blow moulded carry case & mains adaptor		
<b>Anton Service Costs</b>		
Anton offer full service and calibration facilities for all our products. Following major investments to our service department, we now offer improved turnaround times and have also introduced fixed price annual servicing on Sprint V and eVo range analysers, to give you peace of mind and great value. Visit <a href="http://www.anton-group.com/calibration.htm">www.anton-group.com/calibration.htm</a> for more details.		

<b>KANE International Ltd</b> Swallowfield, Welwyn Garden City Herts. AL7 1JG.		01707 375550 01707 393277 sales@kane.co.uk www.kane.co.uk
<b>KANE77</b>	Complies with EN50543 measuring CO in ambient air.	
<b>Manufacturer's Remarks;</b> Clip-on CO monitor and personal alarm measuring up to 999ppm CO. Visual, audible and vibrating alarm set at 30ppm CO.		
<b>KANECO91</b>	Complies with EN50379 and EN50543 measuring CO in ambient air and boiler flues.	
<b>Manufacturer's Remarks;</b> Handheld CO analyser measuring up to 2,000ppm CO. Includes sampling probe for boiler flue CO emissions. Optional printing of timed and dated records.		



Ambient Air Monitoring



Product Name	Approval Status	Product Image
<p><b>KANE International Ltd</b> Swallowfield, Welwyn Garden City Herts. AL7 1JG.</p>		<p>01707 375550 01707 393277 sales@kane.co.uk www.kane.co.uk</p>
<p><b>KANE100-1</b></p>	<p>Complies with EN50543 measuring CO &amp; CO<sub>2</sub> in ambient air.</p>	
<p><b>Manufacturer's Remarks;</b> As KANE CO91 but also measures CO<sub>2</sub> in ambient air to test flueless gas appliances, commercial kitchens and other workspace air quality.</p>		
<p><b>KANE250</b></p>	<p>Complies with EN50379</p>	
<p><b>Manufacturer's Remarks;</b> Handheld flue gas analyser measuring O<sub>2</sub>, CO and flue temperature. Calculates CO<sub>2</sub>, CO/CO<sub>2</sub> ratio and efficiency. Easy to use rotary dial. 20 record memory and optional printing of timed and dated records.</p>		
<p><b>KANE255</b></p>	<p>Complies with EN50379</p>	
<p><b>Manufacturer's Remarks;</b> Handheld flue gas analyser measuring CO<sub>2</sub>, CO and flue temperature. Calculates O<sub>2</sub>, CO/CO<sub>2</sub> ratio and efficiency. Memory and optional printing of timed and dated records. 5 year sensor guarantee if used under normal operating conditions.</p>		
<p><b>KANE251</b></p>	<p>Complies with EN50379</p>	
<p><b>Manufacturer's Remarks;</b> As KANE 255 but with higher range CO sensor (10,000ppm instead of 2,000ppm). Extra pre-programmed fuels including 'user fuel'. Optional factory fitted NO sensor.</p>		
<p><b>KANE455</b></p>	<p>Complies with EN50379 and EN50543</p>	
<p><b>Manufacturer's Remarks;</b> As KANE 255 but also measures differential temperature and pressure/draught to 0.001mbar resolution. Room / ambient CO testing. Wireless data transfer option. 5 year sensor guarantee if used under normal operating conditions.</p>		
<p><b>KANE451plus</b></p>	<p>Complies with EN50379 and EN50543</p>	
<p><b>Manufacturer's Remarks;</b> As KANE 455 but with higher range CO sensor (10,000ppm instead of 2,000ppm). Extra pre-programmed fuels including 'user fuel'. Optional factory fitted NO sensor.</p>		
<p><b>KANE457</b></p>	<p>Complies with EN50379 and EN50543</p>	
<p><b>Manufacturer's Remarks;</b> As KANE455 but can also measure ambient CO<sub>2</sub> in ppm. Ideal for investigation of fumes (CMDDA1), testing flueless gas appliances, commercial kitchens and other workspace air quality.</p>		
<p><b>KANE905</b></p>	<p>Complies with EN50379</p>	
<p><b>Manufacturer's Remarks;</b> Handheld commercial / industrial flue gas analyser measuring O<sub>2</sub> and CO (4,000ppm) with option to measure two further gases, NO, NO<sub>2</sub> or SO<sub>2</sub>. Infrared output to optional printer. Wireless options to link to Android, Windows PC or iOS.</p>		

Product Name	Approval Status	Product Image
<p><b>KANE International Ltd</b> Swallowfield, Welwyn Garden City Herts. AL7 1JG.</p>		<p>01707 375550 01707 393277 sales@kane.co.uk www.kane.co.uk</p>
<p>KANE945</p>	<p>Complies with EN50379</p>	
<p><b>Manufacturer's Remarks;</b> As KANE905 but with upgraded pump and Teflon lined flue probe for emission critical measurements.</p>		
<p>LS1/B</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Handheld combustible gas leak detector with LED and audible indicators. Alarm feature.</p>		
<p>KANE3200</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Low cost handheld micromanometer, measures +/- 200mbar, (+/- 999 if displaying in pascal), with resolution to 0.01mbar / 1 pascal. Ideal for flue draught readings if used with the optional flue sampling probe.</p>		
<p>KANE3500-1</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Handheld micromanometer, measures +/- 80mbar with resolution to 0.001mbar / 0.1 pascal. Ideal for flue draught readings (optional flue sampling probe required) and for tightness / let by tests. Optional printing of timed and dated records.</p>		
<p>KANE3500-2</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> As 3500-1 but measures 0 to +/- 160mbar with resolution to 0.003mbar / 0.3 pascal.</p>		
<p>KANE Fixed Service Costs</p>		
<p>The KANE fixed price service policy returns instruments to published specification. If serviced annually by KANE, KANE flue gas analysers have a six year warranty – See <a href="http://www.kane.co.uk">www.kane.co.uk</a> or call 01707 375550 for more details and prices.</p>		
<p><b>TPI Europe Ltd</b> Longley House, International Drive, Southgate Crawley, West Sussex. RH10 6AQ</p>		<p>01293 530196 01293 531870 sales@tpieurope.com www.tpieurope.com</p>
<p>TPI770</p>	<p>Complies with BS7967 for measuring CO in ambient air.</p>	
<p><b>Manufacturer's Remarks;</b> CO monitor measuring up to 999ppm CO in 1 ppm increments. Visual &amp; audible alarm set at 30ppm CO (user adjustable). Will also display the maximum CO level and elapsed time since power on.</p>		

Ambient Air Monitoring

Product Name	Approval Status	Product Image
<p><b>TPI Europe Ltd</b> Longley House, International Drive, Southgate Crawley, West Sussex. RH10 6AQ</p>		<p>01293 530196 01293 531870 sales@tpieurope.com www.tpieurope.com</p>
<p>TPI 775</p>	<p>Complies with BS7967 for measuring CO in ambient air.</p>	
<p><b>Manufacturer's Remarks;</b> Combination CO and Combustible Gas Detector. Same features as TPI 770 plus 50ppm sensitivity to Methane to detect combustible gases. Trace leaks using the adjustable tick rate. View both CO and Combustible gases at the same time in one, easy-to-use instrument.</p>		
<p>TPI 709R</p>	<p>Complies with EN50379 &amp; BS7967</p>	
<p><b>Manufacturer's Remarks;</b> Handheld flue gas analyser measuring O<sub>2</sub>, CO, dual temperature &amp; dual pressure. Calculates CO<sub>2</sub> Ratio, Efficiency &amp; Excess Air. Easy to use with single button print option. Multi-Fuel, including Wood and Pellet as Standard. 6 Year Warranty with Remote diagnostics and Fixed Price Servicing. Various kit options available</p>		
<p>TPI 717R</p>	<p>Complies with EN50379 and BS7967</p>	
<p><b>Manufacturer's Remarks;</b> As TPI 709R plus Timed Tightness &amp; CO Build Up Tests. Calibration Countdown on switch on with Next Calibration Due Date and Serial Number on Print-Outs. 6 Year Warranty &amp; various kit options available.</p>		
<p>TPI 716</p>	<p>Complies with EN50379 and BS7967</p>	
<p><b>Manufacturer's Remarks;</b> As TPI 717R plus PC cable &amp; Software and Large easy to read Graphic LCD. Quick switch on, large capacity pump with visible regulated flow rate on screen for better repeatable readings. Upgrade options to add NOx, High CO or Bluetooth available with Free To Download Smartphone App.</p>		
<p>TPI 719</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Combustible Gas Sniffer with 16" Gooseneck, 30 ppm sensitivity and adjustable tick rate for tracing gas leaks.</p>		
<p>TPI 725L</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Pocket Gas Sniffer with 185mm Flexi-Neck. 40 ppm sensitivity and zero button to trace gas leaks.</p>		
<p>TPI 608</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Single input digital manometer with +/- 150 mBar range and 0.01 mBar resolution. Perfect replacement for messy water u-gauge. Ideal for Tightness Test &amp; Burner Pressures. Comes with Wall Hook and Magnet.</p>		
<p>TPI 621</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Dual input digital manometer with +/- 300 mBar range and 0.01 mBar resolution. Perfect replacement for messy water u-gauge. Ideal for Tightness Test &amp; Burner Pressures. Comes with tilt stand protective rubber boot.</p>		

Product Name	Approval Status	Product Image
<p><b>TPI Europe Ltd</b> Longley House, International Drive, Southgate Crawley, West Sussex. RH10 6AQ</p>		<p>01293 530196 01293 531870 sales@tpieurope.com www.tpieurope.com</p>
<p>TPI 665</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> High Pressure dual input digital manometer with +/- 7 Bar (100 PSI) range and 0.001 Bar resolution. ¼" NPT fittings and full data logging facility with time stamp and Print (optional IR Printer) or PC communication (optional software &amp; docking station). Supplied in magnetic protective rubber boot.</p>		
<p>TPI 1008a</p>	<p>Complies with EN 50543</p>	
<p><b>Manufacturer's Remarks;</b> Ambient CO<sub>2</sub> IAQ Monitor &amp; Temperature Meter. 0 to 5,000 ppm CO<sub>2</sub> and -20 to 60 deg C range. Dual display with PC and Print functions and Min/Max &amp; Average recording facilities.</p>		
<p>TPI 1010a</p>	<p>Complies with EN 50543</p>	
<p><b>Manufacturer's Remarks;</b> As TPI 1008A plus CO &amp; Humidity. 0 to 500 ppm CO and 5 to 95% Humidity with Dew Point and Wet Bulb readings. Log up to 1,000 readings in intervals of 1 &amp; 60 minutes.</p>		
<p>TPI 556</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Digital Vane Air Velocity Anemometer with a measuring range of 0.4 to 30 m/s. Reads and displays temperature between -20 and 80 deg C simultaneously. Log up to 1,000 readings and send real time or stored readings to a PC via the optional interface cable</p>		
<p>TPI 575</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Combination Vane &amp; Hotwire Anemometer. Switch between Vane and Hotwire for measuring Low Flow applications with a range of 0.2 to 20 m/s.</p>		
<p>TPI 343</p>	<p>-</p>	
<p><b>Manufacturer's Remarks;</b> Dual Input Digital Differential Thermometer with a range of -50 to 1,350 deg C. Scroll through the Temperature 1, Temperature 2 and the Differential Temperature. Ideal for Flow &amp; Return, Water or Surface temperatures with the optional appropriate industry standard "K" type sub-mini connected probes. Auto Field calibration using a simple crushed ice solution. Supplied in Protective Rubber Boot with Tilt Stand.</p>		
<p>TPI Fixed Service Costs</p>		
<p>The TPI fixed price service policy returns instruments to published specification. If serviced annually by TPI, or one of their approved service centres then TPI flue gas analysers have a six year warranty – See www.tpieurope.com or call 01293 530196 for more details and prices</p>		