PORTABLE GAS DETECTION







Designed by our customers, this robust and accurate gas detector provides unrivalled protection in confined space applications.

- Over 15 "plug-and-play" smart sensors
- PID sensors for VOC detection
- Flexible configuration to suit your requirements
- Audible and visual alarms
- Datalogging for calibration certificates, data management, and event logging
- Robust construction
- Internal pump (optional)
- Easy maintenance
- Low cost of ownership

PS500 Portable 5 Gas Monitor



Auto Bump & Calibration Station

- Simple user interface
- Bump test or calibration

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- Bump/calibration results storage
- Standalone, PC or Ethernet options
- Robust construction

Better detection. Better protection.



The PS500 can be configured to detect up to five gases with its electrochemical and catalytic sensors, photo ionisation detectors (PID), and infrared capabilities.

"Plug and Play" maximizes flexibility by allowing other gases to be detected, by simply inserting a new smart sensor assembly.

The PS500 is effective in noisy environments, featuring a loud (95dB) penetrating and distinctive audible alarm together with a high visibility visual alarm.

With a robust, rubberized casing guaranteeing hi-Impact resistance, the PS500 is ideal for the most demanding industrial environments.

An optional internal pump allows both pumped or diffusion measurements. If the pump is fitted, it can be easily turned on/off, depending on application. E.g. pump on to perform pre-entry measurements correctly, pump off for confined space working.

Features

Green / Red Visual Alarms

	PS500 TECHNICAL SPECIFICATION
Size:	140 x 85 x 45 mm / 5.5″ x 3.3″ x 1.7″
Weight:	0.4 kg / 14 oz.
Humidity:	0-98% non condensing
Alarms:	Visual 360° full light bar, piercing 95db audible Low battery alarm User programmable alarms: Up to 4 alarms per toxic gas (incl. STEL / TWA) 3 alarms for O2 2 alarms for LEL
Display:	LCD backlight display
Datalogging:	Timed: 24 hours of timed logs at 1 log per minute Session: Minimum of 180 logs Calibration: 8 calibration logs
Sampling:	Maximum tubing length - 30 m / 98 ft. (Response times increase by approx. 1 second for every metre / 3 ft. of tubing used)
Battery:	NiMH rechargeable battery - 12 hr. minimum with pump Alkaline battery pack (3 AA) - 12 hr. minimum with pump
Enclosure:	High impact rubberised polycarbonate case
IP Rating:	IP65 (Dust tight and water resistant)
Approvals:	* UL 913 Class I, Div 1 Groups A,B,C,D MED © (0038/YY) - Module B & E C€0518 ATEX II 2 G EEx iad IIC T3 / T4
IECEx:	EEx iad II C T3/T4
Warranty:	2 years

* Excludes NDIR sensor option.



Sample inlet nozzle



Display in alarm conditions

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Configurable calibration options

VOC target gas selection



Automatic Bump Testing and Calibration

To provide accurate performance and results, the PS500 has to be properly used and maintained.

The Auto Bump & Calibration Station (ABC) provides bump testing, calibration and data management options and is compact, robust and intuitive to use.

Two versions of the ABC are available allowing either a single gas cylinder or up to three cylinders to be connected. Additionally, a special three cylinder version is available for reactive gases. The ABC is fully configurable and can operate in three distinct modes of operation:



AUTO BUMP & CALIBRATION STATION TECHNICAL SPECIFICATION			
Size:	200 x 140 x 135mm (7.9″ x 5.5″ x 5.3″)		
Weight:	Singe Gas - 1.2kg (43oz) Multi Gas - 1.35kg (48oz)		
Interfaces:	Standalone /USB /Ethernet		
LED Indicators:	Power (Green) / Testing (Orange) / Pass (Green) / Fail (Red)		
Testing Time:	Bump Test 150 secs Calibration Test 150 secs		
Data Storage:	Up to 6000 Bump & Calibration results		
Power Supply:	12V dc, 2A		
Operating Temperature:	-10°C to 40°C (14°F to 104°F)		
Gas Ports:	Single Gas - 3 (Air, Gas & Exhaust) Multi Gas - 5 (Air, Gas x 3 & Exhaust)		

1. Standalone

- No PC or network connection required
- Simple setup and configuration
- Results stored on ABC
- USB access for results extraction
- Settings App for easy printing of calibration certificates

2.PC

- PC / laptop connected to ABC
- · Setup and configuration using flexiCal Plus software
- Results stored in the PC / laptop
- Easy access to all results
- Powerful data management / calibration certificate generation

3. Ethernet

- Multiple ABC's can be connected to a network
- · Setup and configuration using IMS Settings software
- · All results stored in the IMS database
- Easy access to all results
- Powerful data management / calibration certificate
 generation



PS500 SENSOR	SPECIFICATION

GAS	RANGE	RESOLUTION	SENSOR TYPE	Т90
LEL	0 - 100% LEL 0 - 100% LEL	1% LEL 1% LEL	Cat-bead NDIR	15 sec 35 sec
CO ₂	0 - 2.50% 2.50 - 5.00%	0.01% 0.05%	NDIR	25 sec
O ₂	0-25%	0.1%	Electrochemical	10 sec
СО	0 - 1000PPM	1PPM	Electrochemical	35 sec
H₂S	0-100PPM	1PPM	Electrochemical	25 sec
DUAL TOX CO/ H ₂ S	0-1000PPM(CO) 0-100PPM(H ₂ S)	1PPM	Electrochemical	35 sec & 25 sec
SO ₂	0 - 30PPM 0 - 100PPM	1PPM 1PPM	Electrochemical Electrochemical	10 sec 10 sec
CL ₂	0 - 10PPM	O.1PPM	Electrochemical	30 sec
$\rm NH_3$	0-100PPM	1PPM	Electrochemical	60 sec
NO	0-300PPM	1PPM	Electrochemical	20 sec
NO ₂	0 - 20PPM	1PPM	Electrochemical	185 sec
$\rm PH_3$	0-100PPM	1PPM	PID	5 sec
VOC	0 - 100PPM 0 - 1000PPM	0.1PPM 1PPM	PID PID	5 sec 5 sec
C ₆ H ₆	0 - 20PPM	O.1PPM	PID	5 sec

BATTERY / CHARGER ACCESSORIES

66701	Long duration rechargeable battery pack
66702	Alkaline battery pack (3 x AA batteries)
66703	Fast charge rechargeable battery pack
66140	Standard charger - c/w universal plug (for 66701)
66200	5-way charger - c/w universal plug (for 66701)
66207	10-way charger - c/w universal plug (for 66701)
66206	Car/vehicle charger 12/24V (for 66701)
66513	Fast charger - c/w universal plug
66516	10-way fast charger master unit - c/w universal plug
66514	10-way fast charger slave unit - c/w universal plug

RECOMMENDED ACCESSORIES / SPARE PARTS

66485	Hydrophobic filter - external inline
66136	3m sample line (Tygon [®] tubing) with connector
66930	3m reactive gas tubing with connector
66028	Neck harness
66017	Probe assembly
61208	Datalogging package
61445	PS500 CAL - Calibration Package
66083	Sensor grill hydrophobic filter
66084	Sensor gas inlet filter
66108	Blank sensor plug
66190	Pump assembly kit - includes pump, tubing and fittings
AUTOMATIC BUMP & CALIBRATION	
61502	Auto Bump & Calibration Station - single gas connection (6mm fittings & incl. PSU & USB stick with Standalone software)
61504	Auto Bump & Calibration Station - multi gas connections (4mm / 6mm fittings & incl. PSU & USB stick with Standalone soft- ware)
61504R	Auto Bump & Calibration Station - multi gas connections (for reactive gases CL2 / NH3)
99553	flexiCal Plus software for PC
99118	Demand flow regulator
64265	Tubing with 6mm push fit connection (for 61502)
64443	6mm Push fit Barbed Adaptor
61536	4mm Push fit Barbed Adaptor (for 61504)
GAS KITS	FOR AUTOMATIC BUMP & CALIBRATION STATION
99146	Combi Test Gas Cylinder (2.5% CH ₄ , 500ppm CO, 50ppm H ₂ S, 18% O ₂ , balance N ₂)
64060	Test Gas Kit (Combi test gas 99146, demand flow regulator 99118 c/w 6mm tubing)



Long duration battery pack and instrument with fast charge battery pack, charging in Fast Charger master / slave units.

As an ISO 9001 approved company, Gas Measurement Instruments quality assurance programes demand the continuous assessment and improvement of all GMI products. Information in this leaflet could thus change without notification and does not constitute a product specification. Please contact GMI or their representative if you require more details.

GMI -UK Tel: +44 (0) 141 812 3211 Fax: +44 (0) 141 812 7820 sales@amiuk.com

Service & Calibration Centre - UK *Tel:+44(0)1908568867 Fax:+44(0)1908261056 service@gmiuk.com*

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Sales Office - USA Tel: 713-559-9290 Fax: 281-292-2860 sales@detcon.com

SIMTRONICS Fire & Gas // GM // OLDHAM **Service - Americas** *Tel:* +1 713 559 9230 *Fax:* +1 281 292 2860 *detcon-service@tyco.com*



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