TELEDYNE GAS MEASUREMENT INSTRUMENTS
Everywhereyoulook™

PS500

Portable 5 Gas Monitor

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

Auto Bump & Calibration Station

- Simple user interface
- Bump test or calibration
- Bump/calibration results storage
- Standalone, PC or Ethernet options
- Robust construction

Features

- 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

Description

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.

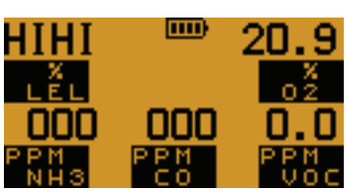
With a robust, rubberized casing guaranteeing hi-Impact resistance, the PS500 is ideal for the most demanding industrial environments.
An optional internal pump allows both pumped or diffusion measurements. If the pump is fitted, it can be easily turned on/off, depending on application. E.g. pump on to perform pre-entry measurements correctly, pump off for confined space working.

Technical Specification

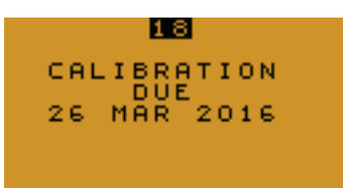
Size:	140 x 85 x 45 mm / 5.5" x 3.3" x 1.7"
Weight:	0.4 kg / 14 oz.
Humidity:	0-98% non condensing
Alarms:	Visual 360o full light bar, piercing 95db audible Low battery alarm User programmable alarms: Up to 4 alarms per toxic gas (incl. STEL / TWA) 3 alarms for O2 2 alarms for LEL
Display:	LCD backlight 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 CE ATEX II 2 G EEx iad IIC T3 / T4
IECEx:	Ex iad IIC T4/T3
Warranty:	2 years

* Excludes NDIR sensor option.

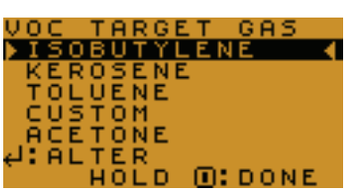
Features



Display in alarm conditions



Configurable calibration options



VOC target gas selection

PS500
Portable 5 Gas Monitor

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:

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

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

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

Auto Bump & Calibration Station Technical Station

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)

PS500

Ordering information

Sensor Specification				
Gas	**Ranges**	**Resolution**	**Sensor Type**	**T90**
LEL	0 - 100% LEL	1% LEL	Cat-bead	15 sec
	0 - 100% LEL	1% LEL	NDIR	35 sec
CO_2	0 - 2.50%	0.01%	NDIR	25 sec
	2.50 - 5.00%	0.05%		
O_2	0 - 25%	0.1%	Electrochemical	10 sec
CO	0 - 1000PPM	1PPM	Electrochemical	35 sec
H_2S	0 - 100PPM	1PPM	Electrochemical	25 sec
DUAL TOX CO/H_2S	0-1000PPM(CO) 0-100PPM(H_2S)	1PPM	Electrochemical	35 sec & 25 sec
SO_2	0 - 30PPM	1PPM	Electrochemical	10 sec
	0 - 100PPM	1PPM	Electrochemical	10 sec
CL_2	0 - 10PPM	0.1PPM	Electrochemical	30 sec
NH_3	0 -100PPM	1PPM	Electrochemical	60 sec
NO	0 - 300PPM	1PPM	Electrochemical	20 sec
NO_2	0 - 20PPM	0.1PPM	Electrochemical	185 sec
PH_3	0 - 100PPM	1PPM	PID	5 sec
VOC	0 - 100PPM	0.1PPM	PID	5 sec
	0 - 1000PPM	1PPM	PID	5 sec
C_6H_6	0 - 20PPM	0.1PPM	PID	5 sec

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

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 software)
61504R	Auto Bump & Calibration Station - multi gas connections (for reactive gases CL_2 / NH_3)
99553	flexiCal Plus software for PC
99118	Demand flow regulator
64265	Tubing with 6mm push fit connection (for 61502)
61540	600mm reactive gas tubing (for 61504R)
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_2S, 18% O_2, balance N_2)
64060	Test Gas Kit (Combi test gas 99146, demand flow regulator 99118 c/w 6mm tubing)

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.

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook™

AMERICAS
4055 Technology Forest Blvd.The
Woodlands, TX 77381
USA
Tel.: +1 713-559-9200

EMEA
Inchinnan Business Park
Renfrew, PA4 9RG
Scotland, UK
Tel : +44 (0)141 812 3211

ASIA PACIFIC
290 Guiqiao Road
Pudong, Shanghai 201206
People's Republic of China
Tel.: +86-21-3127-6373

Copyright © 2020 Teledyne Technologies. GF-00208P_EN. All rights reserved.
gasandflamedetection@teledyne.com

www.teledynegasandflamedetection.com

Udyogi's Name & Address as an Authorised Channel Partner