

PS200

Portable 4 Gas Monitor

Description

The PS200 Series combines quality, ruggedness and advanced technology in a user friendly, portable gas monitor. It is compact, lightweight, water resistant, extremely robust, and is certified to multiple international and regional standards.

The PS200 can measure any combination of LEL, $\rm O_2$, CO and $\rm H_2S$ making it suitable for a wide range of personal monitoring and confined space applications.

In addition to extensive datalogging capabilities, the PS200 is available with an optional internal pump and an wide range of accessories to meet variety of applications.

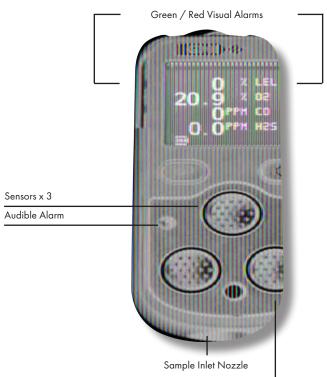
Importantly, the PS200 has been designed to enable easy user maintenance. Including fully automatic calibration station to simplify product compliance.

Features

- Simple 2-button operation
- \bullet Any combination of LEL/O $_{2}/\mathrm{CO/H}_{2}\mathrm{S}$
- Audible, visual and vibrating alarms
- Internal pump (optional)
- Datalogging capabilities (up to 6 months)
- Configurable operation
- Quick field calibration (optional)
- Lightweight
- Sensor integrity checking
- Robust construction
- Ease of maintenance



Features



Charging and communication port (at the back)



Red display in alarm conditions



Configurable calibration options



Configurable bump options

Combustible sensor options

LEL Sensor	Benefit	Gases Detected	Certification Gas Groups	Division / Zone
Standard Filtered	Detects most combustible gases	C1 – C8 Hydrocarbons Includes, but not limited to: Methane, Ethane, Propane, Butane, Pentane, Hexane, Heptane, Octane, Hydrogen	IIC A,B,C and D	Class I, Div. 1,2 Zones 1,2
Enhanced Filtered	Enhanced H ₂ S and Silicone poisoning resistance	C1 – C6 Hydrocarbons Includes, but not limited to: Methane, Ethane, Propane, Butane, Pentane, Hexane, Hydrogen	IIC A,B,C and D	Class I, Div. 1,2 Zones 1,2

Technical Specification

C:=a.	101 v 50 v 20mm (4.9" v 2.2" ·· 1.2"\	
Size:	121 x 59 x 32mm (4.8" x 2.3" x 1.3")	
Weight:	230g (8oz) with pump 215g (7.6oz) without pump	
Temperature:	-20°C to +50°C (-4°F to 122°F)	
Humidity:	0 to 95% R.H non-condensing	
Alarms:	Highly visible flashing LED, piercing >90dB audible, vibrating	
Display:	Green and red LCD backlight display	
Datalogging	Timed: Minimum of 6 months timed datalogging* Session: Minimum of 360 logs Calibration: Minimum of 8 calibration logs Bump: Minimum of 360 logs	
Battery:	Lithium Ion rechargeable battery Run Time: Up to 14 hrs (diffusion) Up to 8 hrs (pumped) Charging Time < 4 hrs	
Enclosure:	High impact rubberized polycarbonate case	
Drop Test:	3m (10 ft)	
IP Rating:	IP67	
Response Times (T90):	LEL = 15 secs (IEC 60079-29-1) O ₂ = 12 secs (BSEN 50104) CO < 20 secs H ₂ S < 20 secs	
Approvals:	ATEX X II 2G Ex ia d IIC T4 Gb IECEX Ex ia d IIC T4 Gb CSA C Combustible Instruments: Class I, Div. 1 Groups A,B,C,D Class I, Zone 1 AEx d ia IIC T4 Gb, Ex ia d IIC T4 Gb Non-combustible instruments: Class I, Zone 0 AEx ia IIC T4 Ga, Ex ia IIC T4 Ga IEX ia d IIC T4/T3 Gb X OEx ia IIC T4/T3 Ga X	

Warranty:	2 years standard warranty against faulty goods or workmanship
	from date of shipment from Teledyne.
	Consumable parts are not included.
	Warranty covers monitor assembly, power supply, and sensors.

 $^{^{\}star}$ This is based on a gas event every 1-hour during a typical 8-hour shift with a datalog interval of every 1 minute.

Sensor specification

Gas	Ranges	Increments	Sensor Type
LEL	0-100% LEL	1% LEL	Catalytic Bead
O ₂	0-25%	0.1%	Electrochemical
CO	0-1000 ppm	1 ppm	Electrochemical
H_2S	0-9.9 ppm 10-100 ppm	0.1 ppm 1 ppm	Electrochemical

Automatic Bump Testing and Calibration

To complement the Personal Surveyor product line, Teledyne has developed a compact, robust and easy to use Auto Bump & Calibration Station that can provide full bump and calibration options. Data transfer is facilitated using a USB memory stick with Standalone software that is simple to set up and customise based on end users' specifications. Standalone, PC, and ethernet versions are available.



Standalone

By adding the Auto Bump & Calibration Station to your PS200 package, test data can be easily retrieved using specific software in a user-friendly time logged format. This gives you the ability to create and print your personalised calibration certificate.

PC

Allows easy configuration (bump test or calibration) of Auto Bump & Calibration Station and allows all results to be automatically stored to a database on the PC. The stored results can be easily viewed and calibration certificates produced. The history of all results can be easily viewed and reports of instruments can be easily compiled.

Ethernet

Same as PC except multiple units can be connected to a network allowing one PC to control and receive data.

Auto Bump & Calibration Station technical specification

Size:	200 x 140 x 135mm (7.9" x 5.5" x 5.3")
Weight:	1.2kg (43oz)
Interfaces:	Standalone / USB / Ethernet
LED Indicators:	Power (Green) / Testing (Yellow) / Pass (Green) / Fail (Red)
Testing Time:	Bump Test 60 secs Calibration Test 90 secs
Data Storage:	up to 5000 Bump & Calibration results
Power Supply:	12V dc, 2A
Operating Temperature	-10°C to 40°C (14°F to 104°F)
Gas Ports:	3 (Air, Combi Gas & Exhaust)
Data Storage: Power Supply: Operating Temperature	Calibration Test 90 secs up to 5000 Bump & Calibration results 12V dc, 2A -10°C to 40°C (14°F to 104°F)

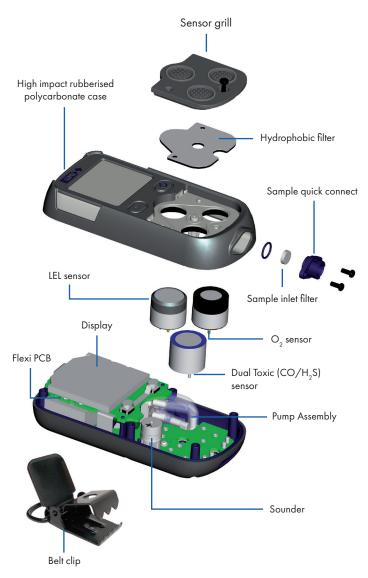
Accessories supplied with the instrument

64260	USB Charging / Comms Clip
64247	Universal Power Plug (Mains – USB)
64172	Quick Operating Instructions

Software

64197	Data downloading Software Package
64184	Auto Bump & Calibration Station Software Package

Simple User Maintenance



Spare parts

64254	Hydrophobic Filter
64240	Sensor grill
64084	Sample Inlet Filter
64241	Quick connect inlet nozzle
64825	LEL sensor (Enhanced Filter)
66725	LEL sensor
64066	O ₂ sensor (2 years)
64067	Dual Toxic CO/H ₂ S Sensor (for instruments with firmware 1.41 or older)
64067DD	Dual Toxic CO/H ₂ S sensor (for instruments with firmware 1.42 or newer)
64176	CO sensor
64128	H ₂ S sensor
64255	Pump Assembly

Additional accessories

66478	Hand Aspirator (c/w 10 ft. tubing)
64136	Sample line (c/w quick connect)
66485	In-Line Hydrophobic Filter Assy
66545	Ball Float
64109	Probe assembly
64100	Rugged Carry Case
64303xx	Rubber Boot (RD - Red / BK - Black / BU - Blue / GN - Green / GY - Grey / OG - Orange / YE - Yellow)

Chargers

64248	In-Vehicle Charging Adaptor (12V/24V – USB)
64138	5 Way Multi-Charger
64491	In-Vehicle Charging Cradle

Automatic Bump & Calibration (ABC)

64052	Auto Bump & Calibration Station (6mm. fittings & incl. PSU and standalone mode software)
64052Q	Auto Bump & Calibration Station (1/4 in. fittings & incl. PSU and standalone mode software)
99553	flexiCal Plus software for PC
99118	Demand Flow Regulator
64265	Tubing with 6mm Push Fit Connector

Manual Bump & Field Calibration Kits

64051	Manual Bump Kit (c/w Combi Test Gas 99146, Direct Flow Regulator, tubing & sample line connector)
943-000QBK-4M9	Combi-Gas EcoBump Kit

Gas Kits for Auto 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 (6mm fittings) (Combi Test Gas 99146, Demand Flow Regulator 99118 c/w 6mm tubing)
64060Q	Test Gas Kit (1/4 in Fittings) (Combi Test Gas 99146, Demand Flow Regulator 99118 c/w 1/4" tubing)

As an ISO 9001 approved company, Teledyine Gas Measurement Instruments quality assurance programmes demand the continuous assessment and improvement of all GMI products. Information in this leaflet coul thus change without notification



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