

# Advanced Test Equipment Corp. www.atecorp.com 800-404-ATEC (2832)





# **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
- Any combination of LEL/O<sub>2</sub>/CO/H<sub>2</sub>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 <sub>2</sub> 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**

Size:	$121 \times 59 \times 32$ mm $(4.8" \times 2.3" \times 1.3")$
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 <sub>2</sub> = 12 secs {BSEN 50104}  CO < 20 secs  H <sub>2</sub> 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  EHIEX  1 Ex ia d IIC T4/T3 Gb X  0 Ex ia IIC T4/T3 Ga X  CE Segurança  Martine  Martine

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.

 $<sup>^{\</sup>star}$  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 <sub>2</sub>	0-25%	0.1%	Electrochemical
СО	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 Temperatur	e: (14°F to 104°F)	
Gas Ports:	3 (Air, Combi Gas & Exhaust)	

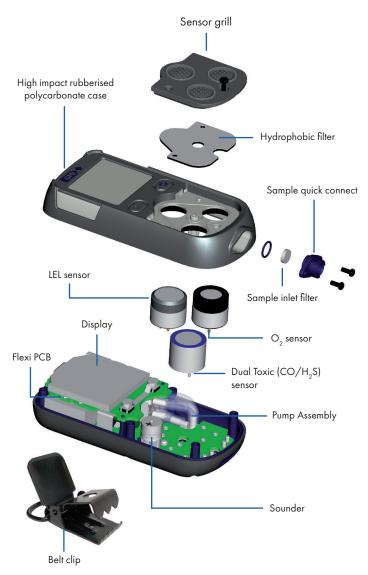
#### Accessories supplied with the instrument

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 <sub>2</sub> sensor (2 years)
64067	Dual Toxic CO/H <sub>2</sub> S Sensor (for instruments with firmware 1.41 or older)
64067DD	Dual Toxic CO/H <sub>2</sub> S sensor (for instruments with firmware 1.42 or newer)
64176	CO sensor
64128	H <sub>2</sub> 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 <sub>4</sub> , 500ppm CO, 50ppm H <sub>2</sub> S, 18% O <sub>2</sub> , balance N <sub>2</sub> )
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, Teledyne 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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