



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, O₂, CO and H₂S 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 extensive range of accessories to meet a wide variety of user applications.

Importantly, the PS200 has been designed to enable easier user maintenance which includes a fully automatic calibration station to simplify product compliance.

Features








- Simple 2-button operation
- Any combination of LEL/O₂/CO/H₂S
- Audible, visual and vibrating alarms
- Fully certified
- Internal pump (optional)
- Datalogging capabilities (up to 6 months)
- Run-time up to 80 hours, when using low power LEL sensor (optional)
- Configurable operations
- Quick field calibration (optional)
- Lightweight
- Sensor integrity checking
- Robust construction
- Ease of maintenance



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Technical Specification

| | |
|-----------------------|--|
| 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 (-40°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 **80 / 14 hrs (diffusion) Up to **20 / 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  II 2G Ex ia d IIC T4 Gb IECEX Ex ia d IIC T4 Gb ATEX  II 1G Ex ia IIC T4 Ga* IECEX Ex ia IIC T4 Ga* CSA  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 Class I, Div. 1 Groups C,D** Class I, Zone 0 AEx ia IIB T4 Ga, Ex ia IIB T4 Ga** Non-combustible instruments: Class I, Zone 0 AEx ia IIC T4 Ga, Ex ia IIC T4 Ga  1 Ex dia IIC T3/T4 Gb  0 Ex dia IIC T3/T4 Ga  MED (0038/YY) — Module B & E ***  |
| 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. |

* This is based on a gas event every 1-hour during a typical 8-hour shift with a datalog interval of every 1 minute.
** Low Power LEL sensor
*** Only applicable to marine variants with "M" prefix.

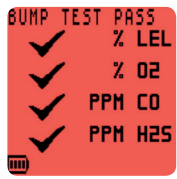
Features



Red display in alarm conditions



Configurable calibration options



Configurable bump options

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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.



Coloured 'rubber boot' for multi-site or multi-application working (7 colours available)

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) |

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.

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 ₂ S | 0-9.9 ppm 10-100 ppm | 0.1 ppm 1 ppm | Electrochemical |

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 |
| Low Power | Improved battery life | C1 - C5 Hydrocarbons Includes, but not limited to: Methane, Ethane, Propane, Butane, Pentane | IIB C and D | Class I, Div. 1,2 Zones 0,1,2 |

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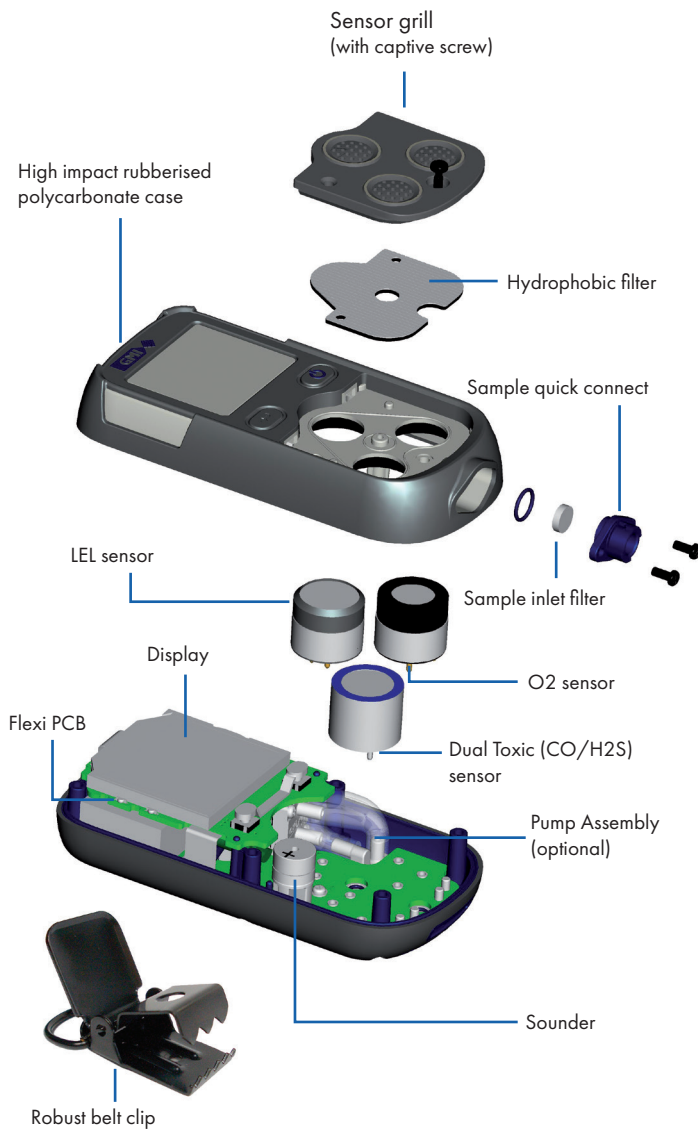
Ordering information & accessories

| Accessories supplied with the instrument | |
|--|------------------------------------|
| 64260 | USB Charging / Comms Clip |
| 64247 | Universal Power Plug (Mains – USB) |
| 64172 | Quick Operating Instructions |

Software

| | |
|-------|--|
| 64197 | Data downloading CD-ROM (c/w Handbook) |
| 64184 | Auto Bump & Calibration Station USB Flash Drive (c/w Handbook) |

Simple User Maintenance



Recommended spare parts

| | |
|-------|---------------------------------------|
| 64254 | Hydrophobic Filter |
| 64084 | Sample Inlet Filter |
| 64825 | LEL sensor (c/w Enhanced Filter) |
| 66725 | LEL sensor |
| 66750 | LEL sensor (Low Power) |
| 64066 | O ₂ sensor (2 years) |
| * | O ₂ sensor (3 years) |
| 64067 | Dual Toxic CO/H ₂ S Sensor |
| 64176 | CO sensor |
| 64128 | H ₂ S sensor |
| 64255 | Pump Assembly |

* contact Teledyne GMI to verify instrument compatibility

Additional accessories

| | |
|-------|--|
| 66123 | Hand Aspirator |
| 66478 | Hand Aspirator (c/w 10 ft. tubing) |
| 66112 | Sample Line Extender |
| 66485 | In-Line Hydrophobic Filter Assy |
| 66545 | Ball Float |
| 64151 | PS200 Confined Space Probe |
| 64100 | Rugged Carry Case |
| 64150 | PS200 Confined Space Demonstration Kit |
| 64160 | PS200 Field Kit |

Charging accessories

| | |
|-------|---|
| 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 USB stick with Standalone software) |
| 64052Q | Auto Bump & Calibration Station (1/4 in. fittings & incl. PSU and USB stick with Standalone 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 (no power required) (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

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|--------|--|
| 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 part no. 99118 c/w 1/4" tubing) |

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