

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, O_2 , CO and 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/O₂/CO/H₂S
- 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
- Coloured 'rubber boot' for multi-site or multiapplication working (7 colours available)



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

| | <u> </u> |
|--------------------------|---|
| Size: | 121 × 59 × 32mm (4.8" × 2.3" × 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 II 2G Ex ia d IIC T4 Gb IECEx Ex ia d IIC T4 Gb CSA cous 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.

Sensor specification

| Gas | Ranges | Increments | Sensor Type |
|------------------|-------------------------|------------------|-----------------|
| LEL | 0-100% LEL | 1% LEL | Catalytic Bead |
| O ₂ | 0-25% | 0.1% | Electrochemical |
| СО | 0-1000 ppm | 1 ppm | Electrochemical |
| H ₂ S | 0-9.9 ppm 10-100 ppm | 0.1 ppm 1 ppm | Electrochemical |

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

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) |
| | |

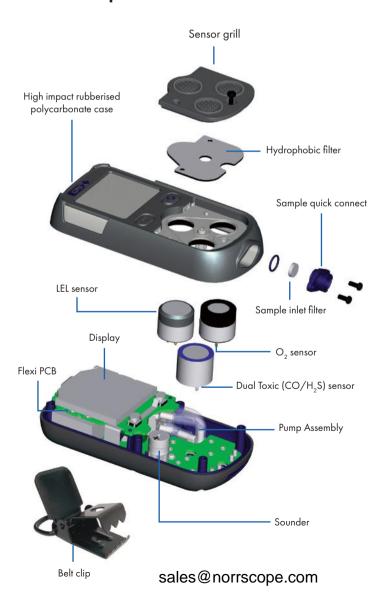
Accessories supplied with the instrument

| 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) | | 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) |