

# AimSafety<sup>™</sup> PM<sub>100</sub> Personal Single Gas Monitor User Instructions











IMPORTANT: Keep these user instructions for reference.

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# **WARNING**

Any unauthorized attempt to repair or modify the product, or any other cause of damage beyond the range of the intended use, including damage by fire, lightning, or other hazard, voids liability of the manufacturer.

Activate this product only if sensor, visual, detection, and audible cover are clear from contaminants such as dirt and debris that could block the area where gas is to be detected.

Do not clean and rub the LCD screen of the products with a dry cloth or hands in hazardous environment to prevent static electricity.

Perform cleaning and maintenance of the products in fresh air that is free of hazardous gases.

Test the response of the sensor regularly with a gas concentration exceeding the alarm set point.

Test LED, audio, and vibration manually.

Gas concentration measurements by the sensor can vary based on the environment (temperature, pressure and humidity). Therefore, calibration of PM100 should be performed in the same (or similar) environment of the device's actual use.

If the temperature changes sharply during use of the device (e.g., indoors vs outdoors), the value of the measured gas concentration can suddenly change. Please use the PM100 after the gas concentration value has stabilized. Severe vibration or shock to the device may cause a sudden reading change. Please use PM100 after the value of

gas concentration has stabilized. Excessive shock to PM100 can cause the device and/or sensor to malfunction.

Alarm values are set based on alarm values required by international standards. Therefore, alarm values should be changed only under the responsibility and approval of the administration of the work site where the instrument is used.

Use IR communications in a safe zone that is free of hazardous gases.

Do not attempt to replace the battery and sensor as PM100 is designed to be disposable. Changing the battery and sensor may impair intrinsic safety and the attempt will void warranty.

# CAUTIONS

Before operating this device, please read the manual carefully.

This device is not a measurement device, but a gas detector.

If calibration and self-test fails continuously, please do not use the device.

For the O2 detector, perform calibration every 30 days in the fresh air environment.

Before use, please check the activation date, and if the activation date has passed, please do not use the device. Clean detectors with a soft cloth and do not use chemical substances for cleaning.

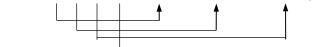
To maintain a 24-month lifetime, avoid the below activities except in necessary cases to check events (Max/Min), lifetime/concentration, and alarm set points. Otherwise, the frequent use of the button will deplete the battery lifetime less than 24 months.

- 1. Push the button frequently without valid reasons.
- 2. Frequent alarm operation or activated alarms ignored for an extended period. \*Normal Alarm Use: 1 time and 2 minutes per day.
- 3. Connect with the PM Link frequently except the bump testing.

View a serial number on the label at the back side of the device. (ex. SI0101001)

1. The serial number uses the format below to indicate the manufacture date:

ex: SI 01 01 001 2018(Year) 01(Month) 01(Day) 001(Manufacture Order)



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## 1 General Information

The PM100 is a maintenance-free, disposable portable single-gas monitor that protects workers by providing exposure detection for specific gases in hazardous environments. The PM100 continuously monitors ambient air conditions and provides real-time gas concentrations on an easy-to-read LCD display. A three-tier alarm system warns the user of the presence of unsafe gas levels with audible, visual and vibrating alarms. The PM100 has sensor options for Carbon Monoxide (CO), Hydrogen Sulfide (H2S), Oxygen (O2), Sulfur Dioxide (SO2), Ammonia (NH3), Nitrogen Dioxide (NO2) and Hydrogen (H2).

#### **Key Features**

#### **Lightweight and Compact**

3.3 oz (93 g) toxic sensors, 3.7 oz (104 g) oxygen sensor

#### User Friendly

Menu-driven, intuitive end-user operation

#### **Programmable Alarm Thresholds**

Audio, buzzer and flashing display alarm

Programmable Calibration and Bump Test Due Notifications

On/Off; timing based on end-user's needs

- Sensor options: CO, H2S, O2, SO2, NH3, NO2, H2
- Large, easy-to-read display
- Single button operation
- Event logging
- Visual alarm with bright flashing LEDs
- Distinct audible alarm
- Vibrating alarm
- Durable weather resistant case
- Rugged clip

#### Programmable options (PM Link)

- Stealth Mode
- Go/No Go display
- Bump Test due
- Calibration due



## 2 Specifications

## 2.1 PM<sub>100</sub> Specifications

Model							
	0	<u> </u>		PM <sub>100</sub>	NILI	NO	
Gas type	O <sub>2</sub>	CO	H <sub>2</sub> S	SO <sub>2</sub>	NH <sub>3</sub>	NO <sub>2</sub>	H <sub>2</sub>
Detecting method				Diffusion	<b>C</b>		
Measure type	0 000/	0 500		trochemical		0 00	0 1000
Range	0 - 30%	0 - 500	0 - 100	0 - 20	0 - 100	0 - 20	0 - 1000
Concor life	Volume	ppm	ppm	ppm	ppm	ppm	ppm
Sensor life Resolution	0.1% Vol	1 0000	0.1	Two years	1	0.1	1
User settings	0.1% VOI	1 ppm	0.1 ppm	0.1 ppm	1 ppm	0.1 ppm	1 ppm
Display		User Selectable via PM Link and PC Software LCD Display					
Alarm display		DEI		EDs (Light-E		nde)	
Audible alarm		INL1		at 4 inches (		Jue)	
Vibrating alarm							
Alarm level set		Vibration alarm User Selectable via PM Link and PC Software					
Event logging		30 events					
Mounting type		Clip					
Program set mode	User Selectable via PM Link and PC Software						
-							
Operating temperature		Toxics: $-40^{\circ}F$ to $+122^{\circ}F$ ( $-40^{\circ}C$ to $50^{\circ}C$ )					
Operating		O <sub>2</sub> : -31°F to 122°F (-35°C to 50°C)					
humidity			5% to 95%	RH (Non-c	ondensing)		
Battery				3.6V 1.2Ah			
Dattery		24 mont	ths based o	n two minu	tes of alarm	ner dav	
Operating life				IR communi			
Material		<b>、</b>		bonate and			
Dimensions		3.6″ (L) x 2	,	3″ (H) (91 m		n x 32 mm)	
Weight (battery,				cs: 3.3 oz (9		,	
clip included)				: 3.7 oz (104			
Approval			Se	ee Certificate	es		
Ingress rating				IP67			
Compliance		Electrom	nagnetic Col	mpatibility D	Directive 20	14/30/EU	
Manufacturing	The c		3	s certified co			:2000
approval				provisio	•		
Bump Station		PM100-STN	l		Not ap	plicable	
PC Interface				PM Link			
Warranty				Two years			

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PM100 Personal Single Gas Monitor

## 3 Product Overview

## 3.1 Monitor Overview





3.2 Display Overview

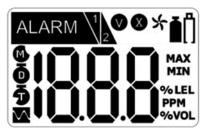


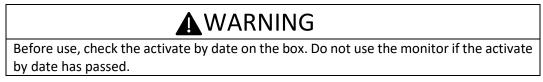
Figure 4-2

LCD display symbols				
ALARM	Alarm condition	M	Remaining Month(s)	
Ţ	Low Alarm	Ō	Remaining Day	
2	High Alarm	5	Remaining Hour(s)	
V	Stabilization Success Or Firmware Version	MAX	Max Peak Value	
×	Stabilization Failure	MIN	Min Peak Value	
*	Fresh Air Calibration Icon	PPM %VOL	Measurement Unit	
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İ	Span Calibration Icon	ſ	Lifetime less than 30 days Or Low Battery
1888	Real-Time Gas Readings Or Numerical Values Or Abbreviated Text		

## 4 Activation



**Note**: The PM100 monitor is designed to operate continuously for the life of the instrument and cannot be turned off once activated.

## 4.1 Activating the Monitor

To activate the monitor, press and hold the [Function key] for 3 seconds. While the key is depressed, a 3-second count-up timer will be displayed. Once the counter reaches three (3), release the [Function key].

The monitor will perform the following startup sequence.





The unit will display the gas type, firmware version, display/alarm test, followed by a 10-second stabilization countdown. Once the countdown is complete, the monitor defaults to Measuring mode, displaying the current gas readings and the  $\heartsuit$  icon.



If sensor stabilization fails, the 🔨 icon will appear on the display and no gas concentrations will be displayed. Perform a calibration (see Calibration) or contact AimSafety for more information.

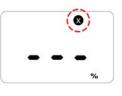


Figure 5-2

## 4.2 User Interface

**Measuring Mode** is the default mode. Once the monitor is activated the meter will continually display measure gas concentrations in real-time.





**Basic Mode** is an optional mode where the remaining sensor life will be displayed if the detected gas levels are below the alarm threshold. The monitor will display the active gas reading only after an alarm threshold has been exceeded. Basic mode can only be enabled using the PM Link and software, or the Bump Test-Calibration Station.





## 4.3 Menu Screens

From the Measurement screen, pressing the [Function key] will step to the next screen. Note: If you do not press the [Function key] within 10 seconds, the display reverts to the main screen.

**Stealth Mode** Press the [Function key] to advance to Stealth Mode (if enabled). Stealth is an optional setting that disables all audible, vibrating alarms and alarm LEDs. When Stealth is enabled, an "StL" screen is added to the menu to indicate that the audible and vibrating alarms are disabled. The display alarm flags are the only indication of an alarm condition.

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PM100 Personal Single Gas Monitor

Peak MIN	Press the [Function key] to advance to Peak MIN indicated by the MIN icon on the display (O2 only), with the numerical value displayed. The Peak MIN is the lowest concentration of oxygen that the sensor has detected since the peaks were last cleared.
Peak MAX	Press the [Function key] to advance to Peak MAX indicated by the MAX icon on the display, with the peak max concentration displayed. The Peak MAX is the highest concentration of gas that the sensor has detected since the peaks were last cleared.
Clear Peaks	Press the [Function key] to advance to Clear Peaks indicated by "CLr" on the display. To clear the peaks, press and hold the [Function key] for three seconds. The unit will beep once, and the MIN/MAX icon will turn off.
Remaining Life	Press the [Function key] to advance to Remaining Life indicated by one of three icons on the display. Remaining Life is the amount of time left on the monitor before End-of-Life. The remaining life is displayed in months, days, or hours as indicated by the display icons.
Alarm 1	Press the [Function key] to advance to Alarm Set Point 1 indicated by the 1 flag on the display. This is the first (low for O2) set point that activates the monitor's alarms. The unit will store this alarm data in event logging.
Alarm 2	Press the [Function key] to advance to Alarm Set Point 2 indicated by the 2 flag on the display. This is the second (high for O2) set point that activates the monitor's alarms. The unit will store this alarm data in event logging.
Firmware	Press the [Function key] to advance to Firmware Version indicated by the V icon on the display. This is the current firmware version that is loaded into the monitor.
Calibration	Press the [Function key] to advance to Calibration indicated by the calibration cylinder bottle icon on the display. The calibration gas concentration will be displayed. See <u>Calibration</u> for more information on monitor calibration.

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## 4.3.1 Menu Flow Chart

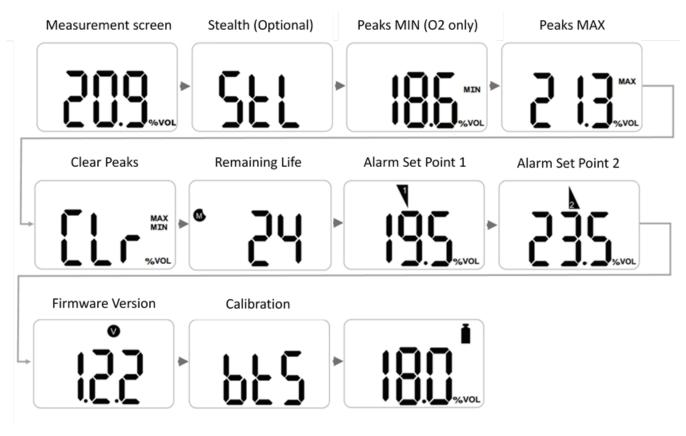


Figure 5-5

## 4.4 Alarm and Alerts

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When the gas concentration exceeds the monitor's alarm set points the alarms will activate: The display will show the Alarm icon, the Alarm 1 or Alarm 2 icon, and the gas level. The monitor will vibrate, the buzzer will sound, and the LEDs will flash. <u>Immediately exit the area to clean air</u>. The alarms will clear once the gas concentrations go below the alarm set points.

4.4.1	Alarm and Alert indication chart

	Alarm	Alarm Standard	LCD Display	Alarm and Vibration Display
	Low Alarm	Exceeds 1st Alarm set point	ALARM Icons & gas concentration	Buzzer, LED
	High Alarm	Exceeds 2nd Alarm set point	ALARM Icons & gas concentration	Buzzer, LED
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Life Remaining	Below 30 days	[] Icon	End-Of-Life in less than 30 days
End-Of-Life	Past 24 months	EoL	Monitor has reached End-Of- Life. (Replace the unit with a new $PM_{100}$ )
Test Failure	Sensor test Or calibration failure	Icon & buzzer	Perform a successful calibration to clear
Battery Low	Low battery power	882	Replace the unit with a new $PM_{100}$
Bump Test	Bump test due	662	Perform a successful bump test to clear
Calibration	Calibration due		Perform a successful calibration to clear
Calibration Failed	Failed calibration		Perform a successful calibration to clear

## 4.5 Default Alarm Set Points

**Note**: Alarm levels can only be changed using the PM Link and software, or the Bump Test-Calibration Station.

Gas Type	CO	$H_2S$	O <sub>2</sub>	SO <sub>2</sub>	NH₃	NO <sub>2</sub>	H <sub>2</sub>
Low Alarm	35 ppm	10 ppm	19.5%	2 ppm	25 ppm	2.5 ppm	100 ppm
High Alarm	100 ppm	15 ppm	23.5%	5 ppm	50 ppm	5 ppm	500 ppm

## 4.6 Self-Test Reminder

The Self-Test reminder option can be enabled using the PM Link and software or the Bump Test-Calibration Station. The Self-Test reminder can be configured to n/a (Off) or between 8 hours to 20 hours. The default configuration is set to "Off", no Self-Test reminder will be displayed.

When enabled, the monitor will prompt the user to perform the test by displaying "StS" on the display when the test is due.

• To activate the test, press the [Function key].

The unit will then perform the following:

- Buzzer test
- LED test
- Vibration
- LCD test
- Display Alarm set point 1
- Display Alarm set point 2
- End

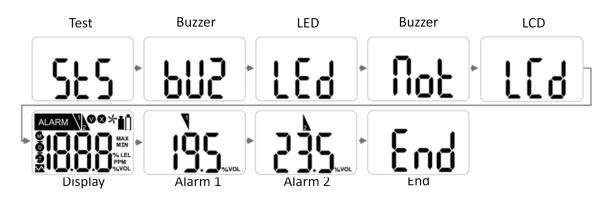


Figure 5-6

The user is required to ensure that all the tests pass successfully and that the alarm values are set to the proper levels.



## 4.7 Bump Test Reminder

The Bump Test due reminder option can be enabled using the PM Link and software or the Bump Test-Calibration Station. The Bump Test reminder can be configured from n/a (Off) to 365 days. The default configuration is set to "Off", no Bump Test reminder will be displayed.

When enabled, the monitor will prompt the user to perform the test by displaying "btS" on the display when the test is due.

- Ensure that the sensor is reading zero (or 20.9% for Oxygen)
- Attach the calibration (cal) cap on top of the sensor inlet
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- Connect the hose from the gas regulator of the calibration gas cylinder to the cal cap. Ensure the calibration gas and gas concentrations match the sensor installed in the instrument
- To activate the test, press and hold the [Function key] for 3 seconds and "tSt" will be displayed
- Turn on the gas regulator
- Once gas is detected, "GAS" will be displayed
- After the test is passed, "SUC" and the ♥ icon will appear on the display followed by the alarm notification
- Once the test has passed, remove the calibration cap and turn off the calibration gas
- Allow a few minutes for the gas to dissipate
- After the gas has dissipated from the sensor, clear the sensor Peak values

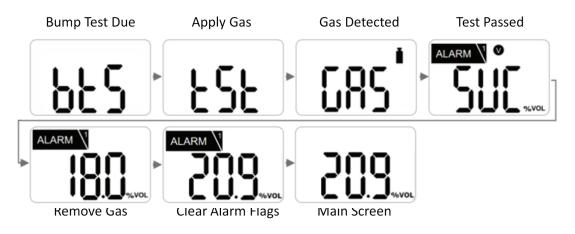


Figure 5-7

If the sensor fails the bump test, an "FA" message with the icon will briefly display, then the "bts" message will resume.

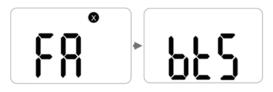


Figure 5-8

Check the calibration gas concentrations, cylinder expiration date, and the monitor gas settings and retest the unit. Or perform a full calibration as defined in the calibration section.

# If the Bump Test fails, do not use the monitor until a successful Bump Test or Calibration is performed.



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## 5 Bump Test

A bump test is used to ensure that the monitor is working properly. During a bump test, a known concentration of gas is applied to the sensor to verify that the sensor responds to the gas, and the alarms activate. This is the only way to effectively confirm that all characteristics of the monitor and the sensor are working correctly.

# **WARNING**

A bump test should be conducted before each day's use. Ensure that you are in a clean environment before performing a Bump Test. The monitor must be calibrated if it fails a Bump Test.

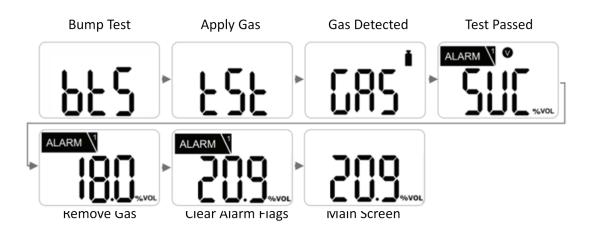
To perform a manual Bump Test: (without the Bump Test Reminder active)

- Ensure that the sensor is reading zero (or 20.9% for Oxygen)
- Attach the calibration (cal) cap on top of the sensor inlet
- Connect the hose from the gas regulator of the calibration gas bottle to the cal cap. Ensure the calibration gas and gas concentrations matches the sensor installed in the instrument.
- Access the Calibration menu (see section Accessing the Calibration Menu)
- "CAL" and the \* icon are displayed.
- Press the [Function key] once and "CAL" and the icon will appear.
- Press the [Function key] again "btS" will be displayed.
- Press and hold the [Function key] for 5 seconds and "tSt" will be displayed
- Turn on the gas regulator
- Once gas is detected, "GAS" will be displayed
- After the test is passed, "SUC" and the ♥ icon will appear on the display followed by the alarm notification and "btS"
- Once the test has passed, remove the calibration cap and turn off the calibration gas. The monitor will default to the main screen after 20 seconds or you can manually exit the calibration menu (see Exiting the Calibration Menu)
- Allow a few minutes for the gas to dissipate
- After the gas has dissipated from the sensor, clear the sensor Peak values (See Clear Peaks)





Figure 6-1





The unit is now ready for use. Do not use the instrument if it fails a bump test or calibration.

If the sensor fails the bump test, an "FA" message with the icon 🛛 will briefly display.

	$\otimes$
F	



Check the calibration gas concentrations, cylinder expiration date, and the monitor gas settings and retest the unit. Or perform a full calibration as defined in the calibration section.



# WARNING

If the Bump Test fails, do not use the monitor until a successful Bump Test or Calibration is performed.

## 6 Calibration

Calibration is the process of adjusting the sensor's response by using a specific concentration of calibration gas. Sensors will drift for a variety of reasons, so it is important to perform a full calibration periodically to ensure that the sensors response to the target gas are accurate. A full calibration consists of two points, a Fresh Air Calibration and a Span Calibration.

**Fresh Air Calibration** adjusts the zero offset of the toxic sensor or sets the oxygen sensor to 20.9% Vol.

**Span Calibration** adjusts the sensors response to gas to account for sensor drift. It is recommended to perform a Fresh Air Calibration prior to a Span Calibration.

# CAUTION

For O2 units: Initial calibration is performed on all devices prior to shipment. Once received, calibration should be performed monthly (or quarterly) depending on frequency of use.

All alarms are muted during calibration.

## 6.1 Accessing the Calibration Menu

To access the calibration menu:

- Press the [Function key] to navigate to the Calibration screen.
- While the Calibration screen is displayed, press and hold down the [Function key] for 5 seconds to access the Calibration mode.

Once the Calibration menu is accessed, "CAL" and the Sicon will be displayed. Calibration menu has four options:

- Fresh Air Calibration
- Span Calibration
- Bump Test
- ESC Exit Calibration Mode

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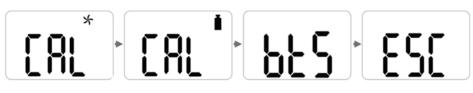


Figure 7-1

## 6.2 Exiting the Calibration Menu

Press the [Function key] until "ESC" is displayed on the screen. Press and hold the [Function key] for 5 seconds, the monitor will return to the Calibration screen. Press the [Function key] again and the unit will return to the Measurement screen.

Note: If you do not press the [Function key] within 20 seconds, the display reverts to the main screen.

### 6.3 Fresh Air Calibration

# **WARNING**

Fresh Air Calibration must be performed in a clean environment that is free from other gases (calibration is assumed to be performed in an environment with an Oxygen concentration of 20.9% Vol.). Fresh Air Calibration should not be performed in a confined space.

To perform a Fresh Air Calibration:

- Access the Calibration menu.
- "CAL" and the 😽 icon will be displayed.
- Press and hold the [Function key] for 5 seconds to start the Fresh Air Calibration.
- When the calibration starts, a countdown (starting at 10) will appear on the screen.

**Note:** Press the [Function key] during the 10 second countdown to abort.

• Once the countdown is complete "CAL", the **V** and **\*** icons will be displayed indicating a successful Fresh Air Calibration.

**Note:** If you do not press the [Function key] within 20 seconds, the display reverts to the main screen.



Figure 7-2

If calibration fails, the icon 💓 will appear on the display. If this continues, please contact the sales representative or AimSafety Technical Support.

## 6.4 Span Calibration

# **WARNING**

When performing a Span Calibration only use certified calibration gas at the required concentration level. Do not use expired calibration gas.

To perform a Span Calibration:

- Access the Calibration menu.
- "CAL" and the \* icon are displayed.
- Press the [Function key] once and "CAL" and the licon will appear.
- Attach the calibration (cal) cap on top of the sensor inlet.
- Connect the hose from the gas regulator of the calibration gas bottle to the cal cap
- Press and hold the [Function key] for 5 seconds to start the Span Calibration.
- When the calibration starts, a 90-second countdown displays. Note: The countdown is only 60 seconds for  $O_2$
- Turn on the calibration gas.
- Once completed, the ♥ icon and the current gas measurement readings will appear on the display.
- The device will return to Measuring mode.
- Turn off the calibration gas and remove the calibration cap.
- Clear the Peak values for the sensor. (See <u>Clear Peaks</u>)

# WARNING

All alarms are muted for approximately one minute after a successful span calibration.



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Figure 7-3

If the calibration fails, the  $\mathfrak{O}$  and  $\blacksquare$  icons and CAL will cycle on the display until a successful calibration is performed. Contact the sales representatives or AimSafety Technical Support if a successful calibration cannot be performed.

#### Default Calibration gas concentrations.

Default calibration gas concentrations can be changed using the PM Link and PC software or with the Bump Test – Calibration Station.

G <b>as</b> Type	CO	O <sub>2</sub>	$H_2S$	SO <sub>2</sub>	$NH_3$	NO <sub>2</sub>	H <sub>2</sub>
Concentration	100 ppm	18.0%	25 ppm	10 ppm	50 ppm	10 ppm	500 ppm

## 7 Event Log

Event logging occurs anytime that an alarm condition is met. Once an alarm condition is met the monitor will automatically save that event in the memory. The monitor can store up to 30 events, once more than 30 events are stored, any new events overwrite the oldest ones. The stored log events can be downloaded using the PM Link and PC software **or with the Bump Test – Calibration Station**.

Event log captures the following monitor information:

- Product Name
- Serial number
- Log Type
- Firmware version
- Alarm setpoints
- Life remaining
- Total Number of Events
- Duration of Events
- Zero Calibration date
- Span Calibration date

Each alarm event records the followings event details:

- Date
- Time
- Duration
- Sensor Readings
- Alarm Type



Product Na	me PM	100	Life R	emaining	19 months 29 day	/s
Serial Num	ber SIO	409016	Total I	Number of Events	8	
Log Type	Ala	rm Log	Durati	on of Events	00:03:48	
Firmware	1.2	0	Zero (	Cal Time	18/01/04 15:27:52	,
		5/23.5	2010 1	Cal Time	18/01/04 15:27:52	
		0,2010	opun			
vent Date	Event Ti	Bump Test	Duration(s)	Sensor Read	Alarm	
	18:12:56	Yes	00:00:41	14.5	LOW Alarm	
018/02/02	23:22:56	No	00:00:41	14.5	LOW Alarm	
018/02/12	23:55:56	Yes	00:00:17	17.0	LOW Alarm	
018/02/14	19:31:26	No	00:01:56	0.0	LOW Alarm	
018/02/22	19:01:51	Yes	00:00:10	17.3	LOW Alarm	
018/03/02	16:48:42	Yes	00:00:25	14.5	LOW Alarm	
018/04/04	17:08:30	No	00:00:08	16.0	LOW Alarm	
018/04/04	17:09:12	No	00:00:08	16.0	LOW Alarm	

Figure 8-1

See the PM Link PC software and Bump Test-Calibration Station manual for more information on Event Log.

## 8 Maintenance and Cleaning

The  $PM_{100}$  monitor is designed to operate continuously for the life of the unit and cannot be turned off once activated. It is important to avoid the following activities as they will decrease the battery lifetime to less than 24 months.

- 1. Frequent or prolonged alarm activation. (Normal Alarm use: 2 minutes per day)
- 2. Unnecessary [Function key] operation
- 3. Connecting the PM Link frequently (except for regular bump testing/calibration)

#### 8.1 Maintenance

Do not disassemble the unit or attempt to repair or modify any component of this instrument. This instrument contains no user serviceable parts, and substitution of components may impair intrinsic safety which may adversely affect product performance.

#### 8.2 Cleaning

# **WARNING**

Do not attempt to clean the instrument in a hazardous environment. Cleaning with a dry cloth may generate a static charge and result in an explosion if located in a hazardous environment.

Occasionally clean the monitor with a soft cloth. Do not use detergents or chemicals. If necessary, use a damp cloth (water only). It is recommended to install the Calibration Cap before cleaning the monitor housing, to keep dirt, dust, or moisture away from the sensor openings and to help keep the sensor filter clean.

Visually inspect the monitor and the IR port window on the top of the monitor. Wipe it with a soft cloth as needed.

## 9 Disposal

The PM100 is designed to be discarded 2 years after activation. To properly dispose of the instrument, follow local solid waste disposal regulations.



## 10 Certificates

The PM100 meets or exceeds the following certification standards.

1100 meets or exceeds the following certification standards.		
IECEx:	Ex ia IIC T4 Ga	1: Explosion protected
		2: Protection Concept
		3: Gas Group
		4: Temperature Classification
		5: Equipment protection level
	Class I, Zone O, AEx ia IIC T4 Ga	
	Class I, Division 1, Groups A, B, C, D, T4	
	C22.2 No. 60079-0:2015; C22.2 No. 60079-11:2014;	
(ŲL)	C22.2 No. 61010-1-12:2010; UL 61010-1,	
<b>`</b>	Ed. 3; UL 913, Ed. 8; UL 60079-0, Ed. 6; UL 60079-11, Ed. 6	
ATEX:	<b>C €</b> 2198 🕼 II 1 G Ex ia IIC T4 G	a IP67
	KRH 17 ATEX 0013	
	Directive 2014/34/EU	
KCS:	Ex ia IIC T4	
	چ.	
	Leeo Leo	
	KTL 16-KA2BO-0457	
INMETRO	Ex ia IIC T4 Ga	
l	BVC16.5919	
	Segurança	
	INMETRO OCP 0018	
Standards:	The electrical apparatus and any acceptable variations to it specified in the	
	schedule of this certificate and the identified documents, was found to	
	comply with the following standards:	
	IEC 60079-0: 2011 Ed. 6	
	IEC 60079-11: 2011 Ed 6	
	UL 61010-1, Ed. 3	
	UL 913, Ed. 8	
	UL 60079-0, Ed. 6	
	UL 60079-11, Ed. 6	
	C22.2 No. 60079-0:2015	
	C22.2 No. 60079-11:2014	
	C22.2 No. 61010-1-12:2012	
	EN COOTO OL 2012   A11-2012	
	EN 60079-0: 2012+A11:2013	
Comuli	EN 60079-11: 2012	
Compliance:	Electromagnetic Compatibility Directive 2014/30/EU	
Manufacturing	The monitor manufacturer is certified compliant with ISO 9001:2000	
Approval:	provisions	

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# 11 Appendix A – Table of Figures

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## 12 Product limited warranty

AimSafety warrants this product will be free from defective materials and workmanship for a period of two (2) years from date of manufacture, provided it is maintained and used in accordance with AimSafety instructions and/or recommendations. If any component becomes defective during the warranty period, it will be replaced or repaired free of charge, if the unit is returned in accordance with the instructions below. This warranty does not apply to units that have been altered or had repair attempted, or that have been subjected to abuse, accidental or otherwise. The above warranty is in lieu of all other express warranties, obligations, or liabilities. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE LIMITED TO A PERIOD OF TWO (2) YEARS FROM THE PURCHASE DATE. AimSafety shall not be liable for any incidental or consequential damages for breach of this or any other warranty, express or implied, arising out of or related to the use of said gas monitor. Manufacturer or its agent's liability shall be limited to replacement or repair as set forth above. Buyer's sole and exclusive remedies are return of the goods and repayment of the price, or repair and replacement of non-conforming goods or parts.

#### Warranty Procedure

Contact the local AimSafety authorized reseller or AimSafety Technical Support to obtain a Return Materials Authorization (RMA). A RMA requires the following information:

- Company name, contact name, phone number, and email address
- Description and quantity of items to be returned
- Equipment serial number(s)
- Reason for return

No returns shall be accepted without an AimSafety RMA. Any returns received without a RMA will be rejected and returned to the sender.

#### **Technical Support Contact Information**

Phone: 1-844-325-3050 Fax: 1-605-951-9616 Email: <u>support@aimsafety.com</u> Website: <u>www.support.aimsafety.com</u>

## **General Contact Information**

Phone : 1-877-367-7891 Fax : 1-605-951-9616 Email: <u>info@aimsafety.com</u> Website: <u>www.aimsafety.com</u>

