



## Personal Monitors

for oxygen, toxic and combustible gas

# Custodian

**Custodian is the most flexible personal monitor you will find.** Every aspect of its operation has been designed to be simple while offering you all the functions you will ever need. Custodian is light and easy to wear, with a bright display, programmable alarms, simple software and nickel metal hydride batteries.

### Rugged construction

- Triax™ casing will not crack or shatter when dropped
- Water and dust resistant to NEMA 4X standard

### Loud & clear programmable alarms

- Wailing multi-tone siren, 92 dBA @ 1 ft
- Ultra bright dual flashing LEDs visible over a 270° angle
- Three levels of alarm - all configurable

### Safe to use

- Large digit, high contrast, back-lit display highly visible over a wide angle
- Monitor and battery pack both Intrinsically Safe

### Comfortable to wear all day

- A compact and lightweight design with a wide range of attachments

### Detachable nickel hydride battery pack

- Will last a whole shift
- No memory effects
- Simple recharging

### Flexible functions

- Password protection limits functions for simple everyday use
- Comprehensive Windows™ compatible software allows functions to be customised

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## Specification

<b>Weight</b>	1.1 lb (500 g)		
<b>Dimensions</b>	6.1 h x 4 w x 2 d inches (155 x 102 x 52 mm)		
<b>Typical measuring ranges and alarm settings</b> (up to 4 gas measurement channels, with three levels of alarm)		range	alarm
	Combustible gas	0-100% LEL	20% LEL
	Oxygen	0-25%	19% & 23%
	Hydrogen sulfide	0-35 ppm	10 ppm
	Carbon monoxide	0-500 ppm	35 ppm
	Sulfur dioxide	0-10 ppm	2 ppm
	Chlorine	0-5 ppm	0.5 ppm
	Nitrogen dioxide	0-10 ppm	2 ppm
	Phosphine	0-5 ppm	0.5 ppm
	Ammonia	0-50 ppm	25 ppm
	Hydrogen ( <i>non-combustible levels</i> )	0-1000ppm	-
	Hydrogen cyanide	0-25 ppm	10 ppm
	Other sensors available		
<b>Typical response times</b>	Methane 20 s, Oxygen 10 s, Typical toxic gas 20 s		
<b>Expected sensor life</b>	Combustible 5 years, Toxic 3 years, Oxygen 1 year minimum		
<b>Audible alarms</b>	Wailing siren, 92 dBA at 1 ft, user selectable tones Confidence blip (selectable) Continuous tone for low battery		
<b>Visible alarms</b>	Ultra bright flashing red LED pair in gas hazard Slow flashing green LED shows instrument is working.		
<b>Display</b>	Custom 7 segment, high contrast LCD 1/3 inch character height for gas reading. Symbols for low battery, TWA alarm, blocked pump, peak hold and password protection. Bright backlight		
<b>Datalogging</b>	Adjustable sample rate, 22-66 hour @ 1 minute sample rate (depending on gas concentration)		
<b>Battery type</b>	Detachable, rechargeable 1.2 Ah nickel metal hydride battery pack (up to 1000 recharge cycles, easily disposable). Optional dry cell pack uses 4 x AA disposable alkaline cells		
<b>Battery life</b>	Standard instrument: 15 hours, Pumped instrument: 12 hours		
<b>Battery charging</b>	Dual rate charger for instrument or detached battery pack Fast charge 6 hours; trickle charge will not damage batteries Multi-charger available as an option Input 100-250 V ac, 12-30 V dc		
<b>Electric pump</b>	Optional internal pump with auto on/off		
<b>Operating temp. range</b>	-4°F to 122°F (-20°C to +50°C)		
<b>Humidity</b>	0-95% RH non condensing		

<b>Approval codes</b>	USA and Canada	Class 1 Division 1, Groups A,B,C,D
	Europe	EEx ia IIC T3 or T4 according to battery pack
<b>Standards</b>	USA and Canada	UL 913, CSA 22.2
	Europe	EN50014, EN50020, EN50018
<b>Ingress protection</b>	NEMA 4X (tested to IP66)	
<b>RF radiation</b>	Tested to EN55022 class B and meets EN50081-2	
<b>RF immunity</b>	Tested to IEC801-3 and meets EN50082-2	
<b>PC interface</b>	PC access is achieved through an RS232 serial link by locating the instrument interface. The Windows™ Setportable is then used to adjust or set: all for all channels, oxygen in the charger/PC compatible software	
	2 descending 1 ascending) and the password. Logmanager controls datalogging, giving the user a choice of direct graphical output or a datafile spreadsheets.	
<b>Autocalibrator</b>	Custodian can be routinely calibrated quickly and simply using Autocalibrator. Autocalibrator handles up interface provides easy datalogging for proof of calibration.	
<b>Accessories</b>	Carry case Earpiece Pocket clip Belt bracket and waist strap Chest harness Shoulder strap Aspirator	Manual bulb and 6.5 ft hose, both non-absorbent and hydrocarbon resistant. 3 ft probe, water trap and extra hose available



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