



Personal Monitors for toxic gas and oxygen

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 nickle metal hydride batteries.

Rugged construction

- Triax™ casing will not crack or shatter when dropped
- Water and dust resistant to IP66 standard.

Loud & clear programmable alarms

- Wailing multi-tone siren, 85 dBA @ 1 m
- 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

Custodian

Specification

Weight	500 g (1.1 lb)	
Dimensions	155 h x 102 w x 52 d mm (6.1 x 4 x 2 inches)	
Typical measuring ranges and alarm settings (up to 4 gas measurement channels, with three levels of alarm)	range	alarm
	Flammable gas	0-100% LEL 20% LEL
	Oxygen	0-25% 19% & 23%
	Hydrogen sulphide	0-50 ppm 10 ppm
	Carbon monoxide	0-500 ppm 50 ppm
	Sulphur 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-flammable levels</i>)	0-1000ppm -
	Hydrogen cyanide	0-25 ppm 10 ppm
	Other sensors available	
Typical response times	Methane 20 s, Oxygen 10 s, Typical toxic gas 20 s	
Expected sensor life	Flammable 5 years, Toxic 3 years, Oxygen 1 year minimum	
Audible alarms	Wailing siren, 85 dBA at 1 m, user selectable tones Confidence blip (selectable) Continuous tone for low battery	
Visible alarms	Ultra bright flashing red LED pair in gas hazard Slow flashing green LED shows instrument is working.	
Display	Custom 7 segment, high contrast LCD 8 mm character height for gas reading. Symbols for low battery, TWA alarm, blocked pump, peak hold and password protection. Bright backlight	
Datalogging	Adjustable sample rate, 22-66 hour @ 1 minute sample rate (depending on gas concentration)	
Battery type	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	
Battery life	Standard instrument: 15 hours, Pumped instrument: 12 hours	
Battery charging	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	
Electric pump	Optional internal pump with auto on/off	
Operating temp. range	-20°C to +50°C (-4°F to 122°F)	
Humidity	0-95% RH non condensing	
Safety certification	Ex95C2348X, Ex95C2349, Ex95Y1350	

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

