



Personal Monitors
for oxygen, toxic and flammable gas

Triple Plus+

Over 40,000 units of the Triple Plus+ design are in use worldwide. Our customers have come to depend on its robust and reliable performance. The extremely durable Triax™ case and internal construction means it won't break when you drop it and it floats when you need it to.

Extremely rugged construction

- Triax™ casing will not crack or shatter when dropped
- Unique internal design will resist the harshest treatment
- Full buoyancy makes recovery from water simple

Loud and clear alarms

- Piercing 85dBA @ 1m
- Highly visible alarms
- Confidence blip, low battery and TWA alarms available

Simple to use

- Large four gas simultaneous text display
- QuickCal – simple rapid calibration
- Simple Windows™ software

Flexible

- All sensor combinations possible
- Extensive datalogging facilities
- Simple customisation for flammable gas factors and time zones

Triple Plus+

Specification

Weight	900 g (2 lb)																																																
Dimensions	118 h x 167 w x 73 d mm (4.65 x 6.6 x 2.9 inches)																																																
Typical measuring ranges and alarm settings (up to four gas measurement channels and three levels of alarm)	<table border="1"> <thead> <tr> <th></th> <th>Range</th> <th>Alarm</th> </tr> </thead> <tbody> <tr> <td>Flammable gas</td> <td>0 – 100% LEL</td> <td>20% LEL</td> </tr> <tr> <td>Methane</td> <td>0 – 100% vol</td> <td>–</td> </tr> <tr> <td>Oxygen</td> <td>0 – 25%</td> <td>19% & 23%</td> </tr> <tr> <td>Hydrogen sulphide</td> <td>0 – 50 ppm</td> <td>10ppm</td> </tr> <tr> <td>Carbon monoxide</td> <td>0 – 500 ppm</td> <td>30 ppm</td> </tr> <tr> <td>Sulphur dioxide</td> <td>0 – 10 ppm</td> <td>2 ppm</td> </tr> <tr> <td>Chlorine</td> <td>0 – 5 ppm</td> <td>0.5 ppm</td> </tr> <tr> <td>Nitrogen dioxide</td> <td>0 – 10 ppm</td> <td>2 ppm</td> </tr> <tr> <td>Phosphine</td> <td>0 – 5 ppm</td> <td>0.5 ppm</td> </tr> <tr> <td>Ammonia</td> <td>0 – 50 ppm</td> <td>25 ppm</td> </tr> <tr> <td>Hydrogen (<i>non-flammable levels</i>)</td> <td>0-2000 ppm</td> <td>–</td> </tr> <tr> <td>Hydrogen cyanide</td> <td>0 – 25 ppm</td> <td>10 ppm</td> </tr> <tr> <td>Hydrogen chloride</td> <td>0 – 10 ppm</td> <td>5 ppm</td> </tr> <tr> <td>Ozone</td> <td>0 – 1 ppm</td> <td>0.5 ppm</td> </tr> <tr> <td>Other sensors available</td> <td></td> <td></td> </tr> </tbody> </table>		Range	Alarm	Flammable gas	0 – 100% LEL	20% LEL	Methane	0 – 100% vol	–	Oxygen	0 – 25%	19% & 23%	Hydrogen sulphide	0 – 50 ppm	10ppm	Carbon monoxide	0 – 500 ppm	30 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>)	0-2000 ppm	–	Hydrogen cyanide	0 – 25 ppm	10 ppm	Hydrogen chloride	0 – 10 ppm	5 ppm	Ozone	0 – 1 ppm	0.5 ppm	Other sensors available		
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Typical response times	Methane 20 s, Oxygen 10 s, Typical Toxic Gas 20 s.																																																
Expected sensor life	Flammable 5 years, Toxic 3 years, Oxygen 2 years.																																																
Audible alarms	Piercing, rapid intermittent, piezo-electric tone, 85 dBA at 1 m. Confidence blip (selectable). Distinctive double blip for low battery.																																																
Visible alarms	Ultra bright flashing red LED in gas hazard. Slow flashing green LED indicates instrument is working. Distinctive double flash of green LED indicates low battery.																																																
Display	2 lines of 24 characters, dot matrix high contrast LCD with back light operating for 30 minutes. Values and units for up to 4 gases displayed simultaneously at current, TWA or peak levels. Low battery, pump failure, real time and elapsed time, calibration and configuration data also displayed.																																																
Datalogging	Adjustable sample rate, 100 hours @ 1 minute sample rate (maximum 6000 data points per channel), logging of events, user and site.																																																
Battery	Sealed lead acid 1.2 Ah, interchangeable rechargeable battery pack. Option for UL approved units: 5xAA disposable alkaline batteries.																																																
Battery life	Standard instrument 12 hours. Pumped instrument 8-10 hours.																																																
Battery charging	Dual rate 'drop in' charger for instrument. Dual rate charger/PC interface for instrument and battery pack.																																																
Electric pump	Optional internal pump with on/off button.																																																
Operating temp. range	-20°C to +50°C (-4°F to 122°F).																																																
Humidity	0 – 95% RH non condensing.																																																

Approval codes	Europe USA and Canada	Ex ias IIC T4 (EEx pending) Class 1 Division 1, Groups A, B, C, D
Standards	Europe USA and Canada	EN50014, EN50020, SFA3009 UL 913, CSA 22.2
Ingress protection	IP65	
RF radiation	EN50081-2	
RF immunity	EN50082-2	
PC Interface	PC access is achieved through an RS232 serial link by locating the instrument in the charger/PC interface. The Windows™ compatible software Setportable is then used to adjust or set: all alarms, levels of alarm (3 for all channels, oxygen 2 descending 1 ascending), clock, password, flammable gas correction factors, time zones, user and site. Logmanager controls datalogging, giving the user a choice of direct graphical output or a datafile compatible with all leading spreadsheets.	
Autocalibrator	Triple Plus+ can be routinely calibrated quickly and simply using Autocalibrator. The internal pump of Autocalibrator handles up to five gases. A PC interface provides easy access with optional datalogging for proof of calibration.	
Accessories	Carry case and belt Baffle plate (to protect sensors) Earpiece Aspirator	Manual bulb and 2 m hose, both non-absorbent and hydrocarbon resistant, 1 m probe, water trap and extra hose available

Charger Options



Accessories



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