



Portable 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 gas 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)		
Ranges and alarms (up to four gas measurement channels)		Standard range	Typical alarms
	Flammable Gas	0-100% LEL	20% LEL
	Methane	0-100% vol	-
	Oxygen	0-25%	19%/23%
Up to three levels of alarm are available per channel	Hydrogen sulphide	0-50ppm	10ppm
	Carbon monoxide	0-500ppm	30ppm
	Sulphur dioxide	0-10ppm	2ppm
	Chlorine	0-5ppm	0.5ppm
	Nitrogen dioxide	0-10ppm	2ppm
	Phosphine	0-5ppm	0.5ppm
	Ammonia	0-50ppm	25ppm
	Hydrogen (non-flammable levels)	0-2000ppm	-
	Hydrogen cyanide	0-25ppm	10ppm
	Hydrogen cyanide	0-10ppm	5ppm
	Other sensors available		
Required ranges and alarms may vary by country and application and these can be configured as required.			
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.		
Battery life	Standard instrument 10 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). Toxic and Oxygen sensors are not rated for continuous operation at high temperatures. Consult Crowcon if operating temperatures are likely to exceed 40°C (104°F) for extended periods.		
Humidity	0 – 95% RH non condensing.		

Approval codes	Europe USA and Canada	ATEX EX II 2G: EEx ib d IIC T4 Class 1 Division 1, Groups A, B, C, D
Standards and Directives	Europe USA and Canada	94/9/EC EN60079-0 EN60079-11, EN50104, EN45544 UL 913, CSA 22.2
EMC	EN5027 FCC CFR47 Part 15, IC ICES03	
PC interface	PC access is achieved through an RS232 serial link by locating the instrument in the charger/PC interface. Portable PC software 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. Portables PC controls datalogging, giving the user a choice of direct graphical output or a datafile compatible with all leading spreadsheets.	
Calibration	Triple Plus+ can be routinely calibrated manually using the menu, using Portables PC software or automatically using Checkbox IMH.	
Accessories	Carry case and belt Baffle plate (to protect sensors) 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

