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^{TM} 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^{TM} 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^{TM} software

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

Personal Monitors for oxygen, toxic and flammable gases

Triple Plus+

HATECH
GASDETECTIETECHNIEK

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)		Range	Alarm
	Flammable Gas	0-100% LEL	20% LEL
	Methane	0-100% vol	-
	Oxygen	0-25%	19%/23%
	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
up to three levels of alarm are available per channel	Ozone	0-1ppm	0.5ppm
	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 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	ATEX I M2: EEX lb d I
		ATEX II 2G: EEx ib d IIC T4
	USA and Canada	Class 1 Division 1, Groups A, B, C, D
Standards	Europe	EN50014, EN50020, 94/9/EC, SFA3009
	USA and Canada	UL 913, CSA 22.2
Ingress protection	IP65	
RF radiation	EN50081-2, EN50270	
RF immunity	EN50082-2, EN50270	

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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