



Personal Monitor

For oxygen, toxic
and flammable gases

Tetra

A personal monitor you can trust

Designed using the latest technologies, Tetra is simple to use, reliable, robust and fully weather protected.

Single button operation and intelligent sensor modules guarantee simplicity and flexibility of use.

The shockproof internal construction and self checking software assure reliable gas detection in the most arduous of environments.

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Reliable

- True single button operation – the most user friendly product available
- Li-ion rechargeable battery gives full 12 hours operation
- Easy to read backlit graphic display for gas readings and diagnostics
- Simple indications of operating status can be viewed at a glance
- 30 day countdown warning of calibration due date

Flexible

- Fully interchangeable intelligent sensor modules
- Available with internal electric sampling pump
- Rechargeable and alkaline battery versions available

Robust

- Tough plastic construction with flexible internal assembly to resist shock and vibration
- Overmoulded rubber for added protection
- Water and dust resistant to IP65

Assurance

- 90dBA audible alarm (@30cm)
- Piercingly bright dual red/blue visual alarm
- Internal vibrating alarm
- Two levels of instantaneous alarm
- Time weighted average alarm for 8 hours and 15 minute averages

Tetra

Specification

Weight	498g (1.1lb)		
Dimensions	122x128x57mm (4 ³ / ₄ x5x2 ¹ / ₂ inches) rechargeable		
	134x128x57mm (5 ¹ / ₄ x5x2 ¹ / ₂ inches) non-rechargeable		
Gas	<i>Range</i>	<i>Alarm UK and ROW</i>	<i>Alarm US</i>
<i>Flammable</i>	0-100%LEL	20%LEL	10%LEL
<i>Oxygen</i>	0-25%	19/23.5%	19.5/23.5%
<i>Hydrogen Sulphide</i>	0-50ppm	5ppm	10ppm
<i>Carbon Monoxide</i>	0-500ppm	30ppm	35ppm
<i>Sulphur Dioxide</i>	0-10ppm	2ppm	2ppm
<i>Chlorine</i>	0-5ppm	0.5ppm	0.5ppm
<i>Nitrogen Dioxide</i>	0-10ppm	3ppm	3ppm
<i>Nitric Oxide</i>	0-100ppm	25ppm	25ppm
<i>Ammonia</i>	0-50ppm	25ppm	25 ppm
<i>Ozone</i>	0-1ppm	0.1ppm	0.1 ppm
<i>Hydrogen</i>	0-1000ppm	N/A	N/A
<i>Hydrogen Cyanide</i>	0-25ppm	5ppm	5 ppm
<i>Hydrogen Chloride</i>	0-10ppm	1ppm	1 ppm
<i>Hydrogen Fluoride</i>	0-10ppm	1ppm	1 ppm
<i>Phosphine</i>	0-2ppm	0.2ppm	0.2 ppm
<i>Ethylene Oxide</i>	0-10ppm	5ppm	5ppm

Other ranges and alarm levels are available on request. Each gas channel can have two instantaneous alarm levels set. Toxic channels also have Time Weighted Average alarms.

Flammable gas calibration is available for methane, propane, butane, pentane and ethylene as standard.

Typical response times	Flammable 20 s, Toxic gas 20 s, Oxygen 10s
Audible Alarms	90dBa @ 30cm (1ft) Multiple alarm sounds allow selection of distinctive tones for different alarm levels
Visible Alarms	Dual colour red/blue flashing LED pair in gas hazard
Vibrating alarm	Internal vibrating alarm
Display	128x64 graphic LCD with backlight, giving simultaneous display for all gas channels. Graphic symbols for battery (with proportional indication of remaining operation time), pump operation, healthy operation or fault warning. Start up indication when calibration is due within 30 days, calibration overdue, or service required.
Display Mode	Normal display for continuous real time gas concentration levels. Display recall for Peak readings and TWA
Datalogging	Event logging
Battery Types	Rechargeable Li-ion battery Non rechargeable pack 3xAA Alkaline cells
Operating time	Based on pumped four gas unit with flammable sensor Rechargeable 12 hours minimum Non-rechargeable 18 hours minimum

Sampling	Hand aspirator or internal electric sampling pump
Operating temp. range	-20°C to +55°C (-4°F to +131°F)
Humidity	0-99% RH
Approval Codes Europe:	ATEX II 2G EEx iad IIC T4 (Tamb -20°C to +55°C) BASEEFA 03ATEX0193
USA & Canada	Class I Division 1 Groups A, B, C, D. (Approvals pending)
Standards Safety Europe	EN50014, EN50020, EN50018, 94/9/EC
USA & Canada	UL913, CSA22.2, 152
Operation	EN50270, EN50271, IEC61508
Ingress Protection	IP65
PC Interface	IR link for RS232 connection. USB/RS232 Converter available. Portables PC software package provides full configuration control, calibration and access to the Event Log file.
Autocalibrator	Tetra can be routinely calibrated using the Crowcon Autocalibrator II in conjunction with the Portables PC software.

Accessories Tetra is supplied with an integral belt/pocket clip. Pumped units include a pump sampling flow plate with 2m (6ft) sampling tube.

Charging power supplies are available in UK, European or US style for direct plug in to mains supply, or as in line versions for 110V or 230V AC with flying lead for fitment of suitable local mains plug.

Optional accessories include: universal harness plate, shoulder strap, chest harness, carry case, aspirator assembly (flow plate bulb and 2m/6ft tubing), fixed and telescopic sample probes, and an in-line water trap.

