



## 4-gas Personal Monitor

For oxygen, toxic  
and flammable gases

# TETRA:3

**A personal monitor you can trust**  
**3<sup>rd</sup> product in the proven Tetra family**

- 1. One-button operation; simple even with a gloved hand**
- 2. Rugged and weatherproof; suitable for today's arduous industrial environments**
- 3. Rechargeable, lithium-ion battery gives over 16 hours operation with no memory effects**
- 4. Intuitive menu and comprehensive full function data and event logging**
- 5. Large, top-mounted 4-gas display; easily viewed from above while wearing instrument**
- 6. Complete audible, visual and vibrating alarms**
- 7. Top end performance in a small and lightweight package**

### Reliable

- Based on tried and tested Tetra instrument
- Proven sensor technology and software operation
- Simple indications of operating status can be viewed at a glance
- 30 day countdown warning of calibration due date

### Performance

- Li-ion rechargeable battery gives >16 hours operation
- True single button operation – the most user friendly range available
- Easy to read backlit graphic display for gas readings and diagnostics

### Robust

- Tough plastic construction to resist even the toughest shock and vibration
- Over-moulded rubber for added protection
- Water and dust resistant to IP65 and IP67

### Alarms

- 95dBA audible alarm
- 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

**Specification**

<b>Weight</b>	269g (9.6oz)		
<b>Dimensions</b>	112x72x49 (tapers to 20mm) 4.4x2.8x1.9 inches		
<b>Gas</b>	<i>Range</i>	<i>Alarm UK/ROW</i>	<i>Alarm USA</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
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, hydrogen and ethylene as standard.			
Typical response times	Flammable 20 s, Toxic gas 30 s, Oxygen 10 s		
Audible Alarms	95dBa Multiple alarm sounds allow selection of distinctive tones for different alarm levels		
Visible Alarms	Dual colour red/blue flashing LED pairs in gas hazard		
Vibrating alarm	Internal vibrating alarm		
Display	Graphic LCD with backlight, giving simultaneous display for all gas channels. Graphic symbols for battery (with proportional indication of remaining operation time), 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 real time gas concentration levels. Display recall for Peak readings and TWA		
Datalogging (optional)	Timed datalogging: 50 hours at 1-minute data rate (3000 records) Threshold logging (starts after adjustable preset level) Event logging: >1500 events		
Battery	Rechargeable Li-ion battery		
Operating time	Based on four gas unit with flammable sensor >16 hours		
Sampling	Diffusion or hand aspirator		
Operating temp. range	-20°C to +55°C (-4°F to +131°F)		
Humidity	0-99% RH		
Ingress Protection	IP65 and IP67		

Approval Codes Europe:	ATEX II 2G EEx iad IIC T4 (Tamb -20°C to +55°C) BASEEFA05ATEX0187
International:	IECEx Ex iad IIC T4 (Tamb -20°C to +55°C) BAS05.0059
USA	Class I Division 1 Groups A, B, C, D. pending
Safety Standards Europe	EN50014, EN50020, EN50018, 94/9/EC
USA & Canada	UL913, CSA22.2, 152
Operation Standards	EN50270, EN50271, IEC61508, EN61779
PC Interface	RS232 connection from interface module in charger RS232/USB converter available
Calibration	Tetra :3 can be routinely calibrated using Portable PC software or Crowcon Checkbox IMH.
Accessories	Tetra :3 is supplied with an integral alligator clip.
Charger options	Single way drop in charger with options of UK, European or US style plug-in mains supplies, or in-line 110, 230 or universal supply. Optional PC interface module within the single way charger. 5 way multicharger with universal power supply.

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

**Gas Test Kit**

All Tetra :3 instruments are pre-programmed for use with the Gas Test Kit and need no special training or equipment to verify that the monitor is working within acceptable limits.

The Gas Test Kit provides a simple and convenient means of carrying out either a pre-use (bump) or a simultaneous four gas calibration for flammable gas, oxygen, carbon monoxide and hydrogen sulphide.

The kit includes a 34 litre gas bottle containing a multi-gas mix with a special 'Trigger' regulator, a magnet and a clip-on flow plate, all supplied in a convenient carry case.

Swiping the magnet past the Tetra :3 display initiates a special test mode, then the gas is applied. The Tetra :3 evaluates the response to the gas and if it is within defined limits the Tetra :3 signals a successful test. A test failure brings up an advisory calibration warning.

If the user performs a manually selected zero prior to test initiation Tetra :3 offers the option of running a simultaneous four-gas calibration rather than just a verification test.

P01024 Issue 1 01/06