



4-gas Personal Monitor for oxygen, toxic and flammable gases

TETRA:3

A personal monitor you can trust
3rd product in the proven Tetra family

Single button operation; simple even with a gloved hand
Rugged and weatherproof; suitable for today's arduous industrial environments
Rechargeable, lithium-ion battery gives over 16 hours operation with no memory effects
Intuitive menu and comprehensive full function data and event logging
Large, top-mounted 4-gas display; easily viewed from above while wearing instrument
Complete audible, visual and vibrating alarms
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

Weight	269g (9.6oz)		
Dimensions	112 x 72 x 49 (tapers to 20mm) 4.4 x 2.8 x 1.9 inches		
Gas	Range	Alarm UK	Alarm USA
Flammable	0-100%LEL	20%LEL	10%LEL
Oxygen	0-25%	19/23.5%	19.5/23.5%
Hydrogen Sulphide	0-100ppm	5ppm	10ppm
Carbon Monoxide	0-500ppm	30ppm	35ppm

Required ranges and alarms may vary by country and application and these can be configured as required.

Each gas channel can have two instantaneous alarm levels set.

Toxic channels also have Time Weighted Average alarms.

T3 is also available in a non-certified CO₂ option replacing the flammable sensor.

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

Typical response times	Flammable 20 s, Toxic gas 20 s, Oxygen 10 s
Audible Alarms	95dB Multiple alarm sounds allow selection of distinctive tones for different alarm levels
Visible Alarms	Dual color 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) 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	0-99% RH
Ingress Protection	IP65 and IP67

Approval Codes	
<i>Europe</i>	ATEX II 2G EEx iad IIC T4 (Tamb -20°C to +55°C) BASEEFA05ATEX0187
<i>International</i>	IECEX Ex iad IIC T4 (Tamb -20°C to +55°C) BAS05.0059
<i>USA & Canada</i>	Class I Division 1 Groups A, B, C, D.
Safety Standards	
<i>Europe</i>	EN60079-0, EN60079-11, EN60079-1, 94/9/EC
<i>USA & Canada</i>	CSA22.2, 152

Operation Standards	EN50270, EN50271, EN50104, EN45544, EN60079, IEC61508
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.
Optional Accessories	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.
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.

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 can be used with either 34 or 58 litre gas bottles containing a specified multi-gas mix and has a special 'Trigger' regulator, a magnet and a clip-on flow plate.

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.