



## INSTRUMENTATION

 **SPERIAN**  
Protection you can trust





Sperian Instrumentation offer a complete line of gas detection products suitable for the emergency services and different industry applications, that are easy-to-use, easy-to-maintain and budget-friendly.

Since 1981, Sperian Instrumentation (the new name of Biosystems) has been a world leader in designing and manufacturing easy-to-use, high-quality instrumentation products. From single and multi-sensor gas detectors to respirator maintenance equipment, Sperian products work at optimum levels under extreme conditions. Some of these conditions involve the potential exposure to toxic gases, oxygen deficient environments, or explosions caused by the presence of combustible gases. Most of these gases cannot be detected by smell or sight and the only way to ensure that atmospheric conditions are safe, is to use portable gas detection instruments.

**Scenarios.** Some of the more common scenarios where gas detection may be required are: hazmat incidents, confined space rescue, clandestine drug lab response, and for monitoring carbon monoxide and/or hydrogen cyanide exposure in overhaul and entry operations, to name a few.

**Choices.** Sperian provides a variety of choices for industrial and emergency service applications. All our instruments are rugged in design and built to handle the harshest environments.

# Portable, reliable, Sperian Instrumentation.



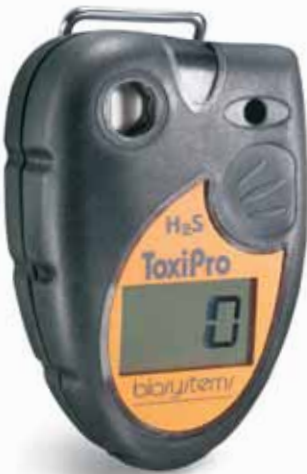


## >>> **NEW!** ToxiLtd™/Toxi3Ltd™

The ToxiLtd series is a low cost, fully-featured, disposable single gas monitor. The ToxiLtd has an operating life of 2 years, while the Toxi3 Ltd has an operating life of 3 years.

- ToxiLtd is a 2 year disposable gas detector
- Toxi3Ltd is a 3 year disposable gas detector
- Easy to use with one button operation
- Loud, audible and bright visual alarms plus vibrating alarm is standard on both models
- 20 incident event logger standard
- Rated to IP65/IP67 for protection against dust and water

Item #	Description
54-44-90V8	ToxiLtd O <sub>2</sub>
54-44-01V8	ToxiLtd CO
54-44-02V8	ToxiLtd H <sub>2</sub> S
54-52-01V8	Toxi3Ltd CO
54-52-02V8	Toxi3Ltd H <sub>2</sub> S



## >>> Biosystems ToxiPro®

ToxiPro is a fully serviceable, reusable gas detector with real-time Peak, STEL (Short Term Exposure Limit) and TWA (Time Weighted Average) readings, and a datalogger built in as a standard feature. The ToxiPro features one-button calibration. To make routine maintenance even easier, the ToxiPro can be used with the IQ Express Docking Station - an automatic bump test and calibration station with built-in record keeping.

- Compact and rugged design with one-button operation
- Available sensors: O<sub>2</sub>, CO, CO+, H<sub>2</sub>S, SO<sub>2</sub>, Cl<sub>2</sub>, ClO<sub>2</sub>, NH<sub>3</sub>, NO<sub>2</sub>, PH<sub>3</sub>, HCN, CO-H
- Top and front mounted bright LED
- Continuous real-time gas reading during alarm
- All ToxiPro models include vibrating alarm and datalogging as a standard feature
- Compatible with the Biosystems IQ Express single-gas docking station
- Rated to IP65/IP67 for protection against dust and water

Item #	Description
54-45-90VD8	Oxygen (O <sub>2</sub> )
54-45-01VD8	Carbon Monoxide (CO)
54-45-02VD8	Hydrogen Sulfide (H <sub>2</sub> S)
54-45-03VD8	Sulphur Dioxide (SO <sub>2</sub> )
54-45-09VD8	Nitrogen Dioxide (NO <sub>2</sub> )
54-45-13VD8	Phosphine (PH <sub>3</sub> )
54-45-18VD8	Chlorine (Cl <sub>2</sub> )
54-45-21VD8	Ammonia (NH <sub>3</sub> )
54-45-10VD8	Hydrogen Cyanide (HCN)

## >>> Biosystems IQ Express™ Docking Station

- A fully automated bump test and calibration station for the Biosystems ToxiPro®, Biosystems ToxiLtd®, and Biosystems Toxi3Ltd™ single gas-detectors
- Automatically identifies instrument, tests alarms and battery, and downloads records
- Automatic instrument calibration if necessary
- Link up to four docks to a single gas supply
- Connects to PC via USB port or Ethernet (optional)



Item #	Description
54-46-9008	Biosystems IQ Express with Accessories for O <sub>2</sub> , CO or H <sub>2</sub> S Instruments
54-46-9108N	Enhanced Biosystems IQ Express, Ethernet-Ready for O <sub>2</sub> , CO, H <sub>2</sub> S, SO <sub>2</sub> , Cl <sub>2</sub> , NO <sub>2</sub> , NH <sub>3</sub> , HCN, or PH <sub>3</sub> Instruments

*Demand flow regulators, calibration gas and ToxiPro/ToxiLtd/Toxi3Ltd each sold separately.*



## >>> ToxiVision IR®

The ToxiVision IR for Carbon Dioxide (CO<sub>2</sub>) uses a Non-Dispersive Infrared (NDIR) sensor with continuous auto ranging detection of carbon dioxide levels from as low as 10 ppm to 50,000 ppm. The ToxiVision IR for methane (CH<sub>4</sub>) uses a Non-Dispersive Infrared (NDIR) sensor for the detection of both low and high levels of methane gas. The ToxiVision IR CH<sub>4</sub> can be configured to display methane readings from 0 to 100% LEL, or 0 to 5% CH<sub>4</sub>.

- Compact and Rugged
- One button operation
- IR CO<sub>2</sub> (Carbon Dioxide) models for wineries, breweries and carbonated beverage handling etc
- IR CH<sub>4</sub> (methane) models for coal mines, natural gas industry, landfills etc
- Datalogging is included on all ToxiVision IR instruments as a standard feature
- Alkaline versions rated to IPX7 and NiMH versions rated to IPX5 for protection against water

Item #	Description
54-37-50AD8	CO <sub>2</sub> Alkaline
54-37-50ND8	CO <sub>2</sub> NiMH
54-37-51AD8	CH <sub>4</sub> Alkaline
54-37-51ND8	CH <sub>4</sub> NiMH



## >>> Biosystems MultiPro™

The MultiPro is the perfect partner for confined space work providing real time readings for up to 4 gases (O<sub>2</sub>/CO/H<sub>2</sub>S/LEL), true one-button operation (including calibration), and a built-in datalogger for storage of events and easy download to computer.

- Real-time readings of up to four gases simultaneously
- Easy one-button operation and calibration
- Large, easy-to-read, front-mounted, backlit LCD display
- Optional screw-on pump with automatic leak test and low flow alarm
- In-vehicle 12 volt charger available
- All MultiPro instruments include vibrating alarm and datalogging as a standard feature
- Interchangeable alkaline or rechargeable Li-Ion battery packs
- Compatible with Biosystems MultiPro IQ Express Dock
- Rated to IPX5 for protection against water

Item #	Description
54-48-314AYD-8	O <sub>2</sub> /CO/H <sub>2</sub> S/LEL ALKALINE
54-48-314NYD-8	O <sub>2</sub> /CO/H <sub>2</sub> S/LEL LI-ION
54-48-314NVYD-8	O <sub>2</sub> /CO/H <sub>2</sub> S/LEL LI-ION VALUE PACK
54-48-314NCYD-8	O <sub>2</sub> /CO/H <sub>2</sub> S/LEL LI-ION CONFINED SPACE KIT

*Additional sensor configurations and accessories available upon request.*

## >>> Biosystems MultiPro IQ Express™ Docking Station

- Fully automated bump test and calibration station for the Biosystems MultiPro gas detector
- Automatically identifies instrument, tests alarms and battery, and downloads records
- Automatic instrument bump test and calibration, if necessary
- Connects to PC via USB port or Ethernet (optional)

Item #	Description
54-49-9008	Biosystems MultiPro IQ Express Dock w/Software, Installation Disks, Manual
54-49-9008N	Biosystems MultiPro Dock, Ethernet-Ready

*Demand flow regulators, calibration gas and Biosystems MultiPro sold separately.*





## >>> Multi Vision®

The MultiVision is a multi-gas detector designed to provide reliable safety at the touch of a button. Available with up to four independent sensors for the detection of O<sub>2</sub>/CO/H<sub>2</sub>S & LEL, the MultiVision is the perfect monitor for confined space gas detection when you require an instrument that is fully waterproof.

- Easy one button operation
- Extra large display
- Readings of up to four gases simultaneously
- Rugged and weatherproof
- Long Battery life
- Datalogging is included on all MultiVision instruments as a standard feature
- Rated to IPX7 for protection against water

Item #	Description
54-40-30102AD	LEL/O <sub>2</sub> /CO/H <sub>2</sub> S Alkaline
54-40-30102ADP	LEL/O <sub>2</sub> /CO/H <sub>2</sub> S Alkaline with pump
54-40-30102ND	LEL/O <sub>2</sub> /CO/H <sub>2</sub> S NiMH
54-40-30102NDP	LEL/O <sub>2</sub> /CO/H <sub>2</sub> S NiMH with pump

*Additional sensor configurations and accessories available upon request.*





## >>> **NEW!** Biosystems PHD6™

Sperian Instrumentation make gas detectors and calibration stations that are easy to use and maintain. The Biosystems PHD6 is our newest multi-gas detector. Nineteen available toxic gas sensors, along with oxygen, LEL, a PID sensor for the detection of Volatile Organic Compounds (VOCs), and IR sensors for the detection of CO<sub>2</sub> and CH<sub>4</sub> make this instrument our most versatile gas detector ever. Plus, the Biosystems PHD6 offers automatic calibration, menu control over all instrument settings and a status bar with easily understood icons at the bottom of the LCD to give the user immediate access to everything from time to calibration status. With 5 sensor ports and up to 6 channels of detection, the Biosystems PHD6 is a powerful ally to help keep you safe in dangerous conditions.

- Monitors up to six atmospheric hazards simultaneously
- Sensors available for oxygen, combustible gas, volatile organic compounds, and several different toxic gases
- Sensors are easily replaced
- Capable of up to five channels of toxic gas detection, depending on configuration
- Optional Photo Ionization (PID) sensor available for the detection of VOCs
- Optional IR sensors available for the detection of CO<sub>2</sub> or CH<sub>4</sub>
- All PHD6 instruments include vibrating alarm and datalogging as a standard feature
- Optional screw-on pump with automatic leak test and low-flow alarm
- In-vehicle 12 volt charger available
- Interchangeable alkaline and rechargeable battery packs
- Compatible with the Biosystems IQ6 Docking Station

Item #	Description
54-53-A14008000AW-8	O <sub>2</sub> /(CO/H <sub>2</sub> S)/LEL Alkaline
54-53-A14005280AW-8	O <sub>2</sub> /(CO/H <sub>2</sub> S)/LEL/PID Alkaline
54-53-A14008000ACW-8	O <sub>2</sub> /Duo Tox(CO/H <sub>2</sub> S)/LEL Alkaline Confined Space Kit
54-53-A14005280ACW-8	O <sub>2</sub> /Duo Tox (Co/H <sub>2</sub> S)/LEL/PID Alkaline Confined Space Kit
54-53-A14008000NW-8	O <sub>2</sub> /Duo-Tox(CO/H <sub>2</sub> S)/LEL Li-ion
54-53-A14005280NW-8	O <sub>2</sub> /Duo-Tox(CO/H <sub>2</sub> S)/LEL/PID Li-ion
54-53-A03145280NW-8	O <sub>2</sub> /(CO/H <sub>2</sub> S)/LEL/PID/SO <sub>2</sub> Li-ion
54-53-A14215280NW-8	O <sub>2</sub> /(CO/H <sub>2</sub> S)/LEL/PID/NH <sub>3</sub> Li-ion
54-53-A10145280NW-8	O <sub>2</sub> /(CO/H <sub>2</sub> S)/LEL/PID/HCN Li-ion
54-53-A13145280NW-8	O <sub>2</sub> /CO/H <sub>2</sub> S/LEL/PID/PH <sub>3</sub> Li-ion
54-53-A14008000NCW-8	O <sub>2</sub> /Duo Tox(CO/H <sub>2</sub> S)/LEL Li-ion Confined Space Kit
54-53-A14005280NCW-8	O <sub>2</sub> /Duo Tox (CO/H <sub>2</sub> S)/LEL/PID Li-ion Confined Space Kit

*Additional sensor configurations and accessories available upon request.*

## >>> **NEW!** Biosystems IQ6™ Docking Station

The Biosystems IQ6 Docking Station is designed from the ground up to be the easiest dock to use on the market. The dock is configured at the factory with default settings and can be used right out of the box for instrument processing. More advanced users will appreciate the standard USB or optional Ethernet connections. The automatic instrument download feature allows the user to streamline record keeping and make it virtually hands-free. Common Biosystems PHD6 configurations can be processed by the dock in under a minute, reducing labour and calibration gas expenses.

- A fully automated bump test and calibration station for the Biosystems PHD6 multi-gas detector
- Automatically identifies the instrument, tests alarms/battery, downloads records
- Automatic instrument bump test and calibration if necessary
- Connects to PC via USB port or Ethernet (optional)
- Recharges instrument if left in dock (rechargeable Biosystems PHD6 only)



Item #	Description
54-54-9208	Biosystems IQ6 Dock 2 Ports
54-54-9208N	Biosystems IQ6 Dock Ethernet ready 2 Ports
54-54-9408	Biosystems IQ6 Dock 4 Ports
54-54-9408N	Biosystems IQ6 Dock Ethernet ready 4 Ports

*Demand flow regulators, calibration gas and Biosystems PHD6 sold separately.*

## >>> Cannonball 3™



The easy-to-use Cannonball 3 was designed to handle the worst that mother nature can dish out while delivering the high level of safety and reliability that you've come to expect from Sperian. The Cannonball3 includes a sealed case coupled with an oversized, scratch-resistant, self-healing display, and be configured to detect oxygen, combustible gases and vapors and a wide variety of toxic hazards. The optional high sensitivity HC-PPM LEL provides broad range monitoring at PPM levels for nearly all toxic and combustible gases and vapors to address a wide range of health and safety concerns.

- Multiple languages & one button operation
- NiMH battery pack lasts up to 16 hours
- Built in sample draw pump
- Black box data recorder with over 1000 hours of storage
- Other models & configurations available upon request
- Rated to IP65 for protection against dust and water

Item #	Description
54-34-50102ND	LEL/O <sub>2</sub> /CO/H <sub>2</sub> S NiMH Datalogging Single Pump
54-35-50102ND	LEL/O <sub>2</sub> /CO/H <sub>2</sub> S NiMH Datalogging Dual Pump

*Other sensor configurations available upon request.*

## >>> Biosystems PosiChek3®

- Computerised test bench, tests performance of virtually any brand SCBA
- Tests Low Pressure (2216 psig) and High Pressure (4500 psig) units for mask leakage, exhalation check valve opening pressure, static mask pressure, bypass flow rate, pressure gauge accuracy, low pressure alarm activation, first stage regulator performance, breathing resistance at standard and maximum flow rates
- Meets all NFPA requirements for record keeping
- Optional Sound Detection System (SDS) automates the primary audible alarm test
- Custom software available from most SCBA manufacturers

Item #	Description
54-20-0320D-32	POSICHECK 3 EUROPEAN GENERIC VERSION
54-20-2320D-32	POSICHECK 3 EUROPEAN GENERIC WITH EP (ENHANCED PRECISION TRANSDUCER) & SDS (SOUND DETECTION SYSTEM)

Just attach a fully-assembled SCBA to the PosiChek3 test-head, and choose the tests you wish to conduct. The Complete SCBA Test provides a comprehensive evaluation of the SCBA. When a complete test is not required the PosiChek3 "Quick Test" evaluates the operational readiness of most of the components of an SCBA in less than 2 minutes and consumes less than 1% of the SCBA's air supply. Once the tests have been completed, the information can be printed immediately or saved in a user-specified database for future retrieval. The PosiChek3 makes record-keeping easy!

**The Biosystems PosiChek3 is the standard test bench for virtually every major manufacturer of SCBA around the world.**

Thousands of fire departments, refineries, chemical plants, and nuclear power stations rely on the Biosystems PosiChek3 to verify that their SCBAs are fit for use.



## >>> Instrument Approval Quick Reference Chart

Instrument	IECEX	ATEX	UL	CSA	IPXa
Toxi Ltd	•	•	•		IP65/IP67
Toxi 3 Ltd	•	•	•		IP65/IP67
Toxi Pro	•	•	•		IP65/IP67
Toxi Vision IR	•	•	•		Alk: IPX7 Nimh:IPX5
MultiPro	•	•	•	•	IPX5
MultiVision		•	•	•	IPX5/IPX7
PHD6			Approvals pending		
Cannonball3			•	•	IP67

IECEX 60079	Approval Covers Australia and New Zealand, and any other countries that accept IeCEX approvals
ATEX	Approval covers the European Union
UL	Approval covers the USA and any other country which accepts UL approvals
CSA	Approval covers Canada
AS/NZS 2865	SAFE WORKING IN A CONFINED SPACE When working in a confined space, this standard should be referred to.

## >>> Approvals and Ratings

### IP(A)(B)

IP ratings indicate the level to which a product has been tested to be protected against dust and water ingress.

Level	First Numeral <b>(A)</b> Protection against solids	Second Numeral <b>(B)</b> Protection against liquids
X	Non-protected	Non-protected
1	Objects greater than 50mm	Dripping water
2	objects greater than 12mm	Dripping water on enclosure tilted up to 15 degrees
3	Objects greater than 2.5mm	Spraying water up to 60 degrees from both sides
4	Objects greater than 1.0mm	Splashing water from all sides
5	Dust protected	Water jets – water projected at all angles through a 6.3mm nozzle at a flow rate of 12.5 litres/min at a pressure of 30kN/m <sup>2</sup> for 3 mins at a distance of 3 metres
6	Dust-tight	Heavy seas
7	–	Immersion for 30 mins at a depth of 1 metre
8	–	Submersion

# Sperian's IQ Docking Stations pay for themselves in no time!

At Sperian Instrumentation, we're convinced that we make the best docks on the market. Our docks offer incredible processing power and flexibility whilst being extremely easy to use. Just drop the detector in the dock and the dock processes the instrument according to your record keeping protocols. It's that easy.

**Docks help ensure your instruments are ready when you need them.** Sperian's docks require no user interaction. Just put the instrument in the dock and the dock will verify the instrument is in calibration; all sensors are working properly, make necessary adjustments, including calibration, check all alarms for proper operation and record the results from each test. All of this is done in less than a minute.

**Docks reduce calibration gas expenses.** Sperian's docks use a lot less gas than is used during manual calibrations. Here's an example: If you have 10 Biosystems MultiPro™ gas detectors and perform daily sensor verification (bump test), you could spend over \$10,000 per year in gas costs. If you purchase a dock, you can reduce your gas costs by over 60%. So the Biosystems IQ Express™ Dock could save you well over \$6,000 per year in gas costs alone.

**Docks can reduce your legal liability.** No matter how good your record keeping is, manual systems are prone to error and in case of an accident, errors mean liability. Our docks accurately record the results of every test. Your record keeping is flawless.



**SPERIAN PROTECTION AUSTRALIA PTY LTD**

43 Garden Boulevard,  
Dingley,  
Victoria 3172  
Australia

Tel: 1300 139 166

Fax: 1300 362 491

New Zealand

Tel: 0800 322 200