



Key Features

- Integrated on-board controller allows unit to be used as a stand alone monitor, a remote sensing head and single point control unit or as a transmitter in a larger system.
- Integrated, twin color high-intensity strobes offer 200+ degree visible alarm. Yellow for Warning, Red for Danger.
- Integrated 105 dB horn offers highly distinctive audible alarm.
- Easy-to-read 3 digit backlit LCD screen displays real time gas readings.
- Tough IP66, NEMA 4X housing protects unit in harsh conditions or during wash-downs.
- Wide range of customizable options including: alarm levels, relay modes and strobe and horn enable/disable.
- Unit plugs into a standard wall outlet or can be wired into a controller power supply.
- On-board event logger records last 100 alarm events. Event logger has battery backup.
- Remote sensor option allows you to place the sensor up to 50 feet from base unit – allowing base unit to be placed in convenient location.
- Compatible with standard 3 wire 4-20 mA wiring.
- Sensors can be replaced without declassifying area.
- In stand-alone, single person, non-intrusive calibration can be done at the sensor head.
- Front mounted mode button can be disabled, if required.
- Three user-available programmable on-board relays: Warning, Danger and Fault.
- Fault relay notifies for loss of power or missing sensor.
- Optional alarm-latching keeps unit in alarm until manually disarmed.
- Twin NPT connection ports for fast connect without custom fittings.
- Firmware upgradable via IrDA connection.
- Includes 6 foot power cord standard. Optional 15 foot power cord available.
- Uses interchangeable smart sensors for easy change out without reconfiguration.
- Comes with full 18 month warranty.

Product Configurations

Part Number	Description
54-55-XXY	Biosystems NXP
where XX = Sensor Type; Y = Housing Color (0 – Light Grey, 1 – Safety Orange)	
Product Code	Sensor Type
01 – CO	Carbon monoxide
02 – H ₂ S	Hydrogen sulfide
03 – SO ₂	Sulfur dioxide
08 – Cl ₂	Chlorine
13 – PH ₃	Phosphine
19 – CO-H	Carbon monoxide with reduced Hydrogen sensitivity
21 – NH ₃	Ammonia
80 – LEL*	Combustible Gas
90 – O ₂	Oxygen

*LEL sensors must be remotely mounted. The base unit must be mounted in a non-explosive environment. This configuration comes with the Explosion Proof Remote Sensor Kit and a LEL Sensor. Cable for Remote Sensor Kit is ordered separately.

Accessories

Part Number	Description
Remote Sensor Kits	
1029227	Non-Explosion Proof Remote Sensor Kit
1029226	Explosion-Proof Remote Sensor Kit
Cable for Remote Sensor Kit	
1029244	5 ft / 1.5 m sensor cable
1029246	10 ft / 3.0 m sensor cable
1029247	50 ft / 15 m sensor cable
Replacement Smart Sensor	
54-57-XXS	NXP Smart Sensor XX = Sensor Type

Case: NEMA 4X type, IP66
 Dimensions & Weight: 11.0" x 6.50" x 3.56" (279.4 mm x 165.1 mm x 90.4 mm); 2.50 lbs (1.14 Kg)
 Humidity Range: Oxygen – 15% to 90%. Non-condensing
 Power Source: 110 / 220 AC or 12-24 VDC
 Relays: 3: Danger, Warning and Fault
 Signal Output: 4-20 mA; Fault < 2 mA
 Temperature Range: -20°C to 50°C (-4°F to 122°F) – sensor dependant

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>>> INSTRUMENTATION



The Biosystems NXP by Spierian is a safe and reliable fixed placement gas detection system that is both cost effective and ultra easy to install.

The NXP offers a full range of installation options: stand alone, integrated into control systems or as part of a larger gas detection network.

Best of all, the NXP offers incredible standard features: integrated twin color high-intensity strobes, integrated 105 db audio alarm, on-board event logger, real time LCD readout... all in a sleek, tough IP66 housing.

You can relax with the Spierian NXP on the job. Plug it in. Be protected.

BIOSYSTEMS NXP

FIXED GAS DETECTION

Plug.
Protect.
Relax.



Protection in under 5 minutes!

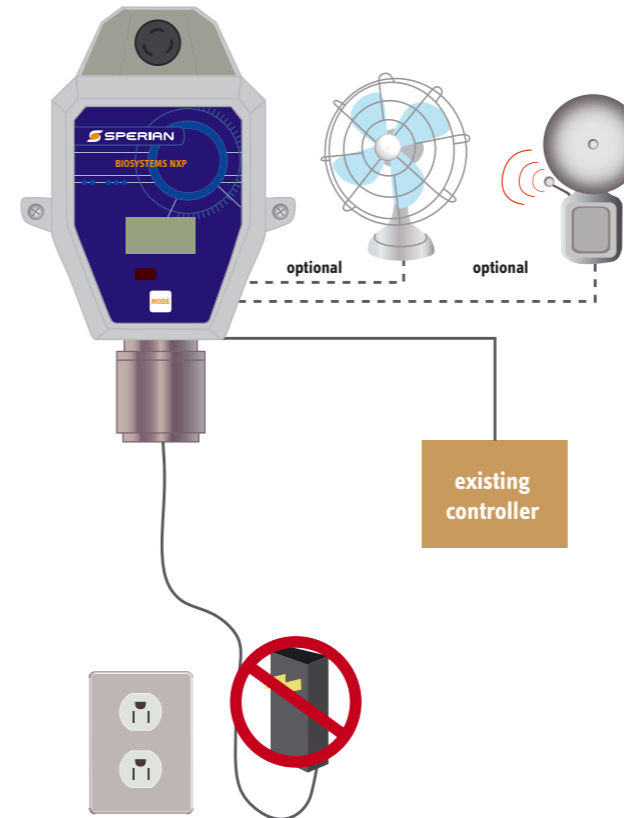
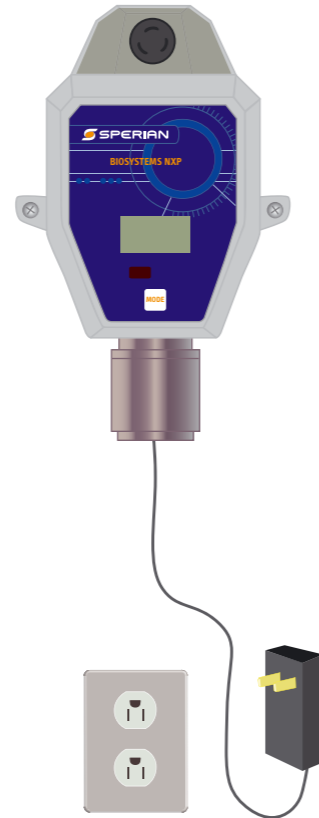
Stand-Alone Mode >>>

Perfect for monitoring occupied locations like loading docks, labs, warehouses and factory areas.

1. Mount the unit on a wall.
2. Plug the unit into a standard wall outlet.
3. Calibrate then relax knowing that you have 24/7 gas monitoring.

Upon alarm the unit will:

- Emit 105 dB audible alarm
- Activate the unit's high-intensity strobes



<<< Controller Mode

(alarm only or active react)

Perfect for adding protection to existing fixed system installations.

1. Mount the unit on a wall.
2. Connect unit to existing 4-20 mA controller circuit.
3. Optionally, connect auxiliary units such as fans, vents or remote alarms.
4. Calibrate and relax knowing that you have 24/7 gas monitoring.

Upon alarm the unit will:

- Emit 105 dB audio alarm
- Activate the units twin high-intensity strobes
- Notify the central controller of the alert
- Trigger the auxiliary relays to turn on fans, open or close vents or activate remote alarms (if installed)

A/C power supply not required if unit is connected to a controller.

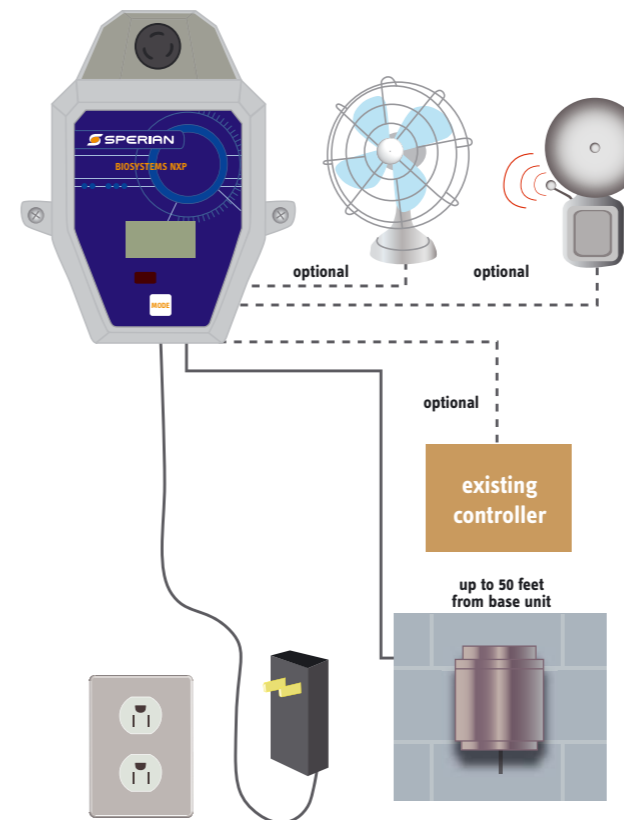
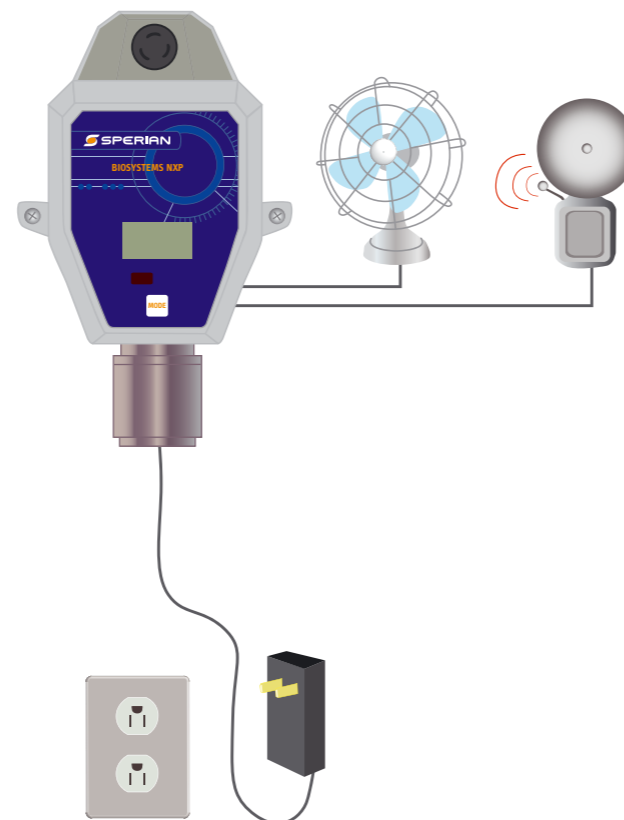
Stand-Alone, Active-React Mode >>>

Perfect for monitoring and remediating occupied or unoccupied areas.

1. Mount the unit on a wall.
2. Connect auxiliary units such as fans, vents or remote alarms.
3. Plug the unit into a standard wall outlet.
4. Calibrate and relax knowing that you have 24/7 gas monitoring.

In case of alarm the unit will:

- Emit 105 dB audio alarm
- Activate the units twin high-intensity strobes
- Trigger the auxiliary relays to turn on fans, open or close vents or activate remote alarms



<<< Remote Sensing Mode

(alarm only or active react)

Perfect for monitoring either explosive* or non-explosive environments; confined spaces or unoccupied spaces.

1. Mount the base unit on a wall in a non-explosive location.
2. Remotely mount the sensor in the hazard area, up to 50 feet from base unit.
3. Connect the sensor to base unit using remote sensor kit.
4. Plug the base unit into a standard wall outlet.
5. Connect auxiliary units such as fans, vents or remote alarms, if desired.
6. Calibrate and relax knowing that your confined spaces or dangerous locations have 24/7 gas monitoring.

In case of alarm the base unit will:

- Emit 105 dB audio alarm
- Activate the units twin high-intensity strobes
- Trigger the auxiliary units turn on fans, open or close vents or activate remote alarms, if installed

*NOTE: If the sensor is mounted in a potentially explosive environment, sensor must be connected to the base unit following NEC guidelines for hazardous locations.

A/C power supply not required if unit is connected to a controller.