



# **Features**

- Up to 100-day battery life
- 360° diffusion gas detection
- Optional four-channel pump module
- Internal 3G/4G wireless works in 100+ countries
- Optional Iridium global satellite module
- Call for help using the SOS latch
- Works seamlessly with Blackline Live cloud-hosted software
- Communicates all data to the Blackline Safety Cloud — no need to collect data from the field
- Blackline Live automates configuration changes, plus firmware updates automatically
- Leverages the same plug-and-play gas sensor cartridges as G7
- Blackline Analytics automates compliance reporting
- Internal GPS and beacon location technology
- Manage G7 EXO area monitors in Blackline Live alongside G7 personal monitors

# G7 EXO

# MOVE YOUR AREA MONITORING PROGRAM INTO THE CLOUD

Until now, conventional area monitors have suffered short battery life, limited configurability and complicated or inadequate connectivity while also being challenging to configure into a seamless network.

G7 EXO is intelligence and versatility wrapped into one game-changing solution. Inside rugged aluminum casing, EXO boasts industry-leading battery life of over 100 days and features a large, full-color display for easy visibility in any condition.

4G cellular connectivity is built-in, with the option to add a satellite module. All you have to do is turn G7 EXO on and it goes to work streaming environmental data to the Blackline Safety Cloud. Advanced analytics capabilities summarize data so you can address safety hazards or facility risks before they become a problem.

Unlike mesh networks, EXO does not require any network configuration — at all. Since each G7 EXO connect directly to the cloud, there's no need for smartphones, Wi-Fi or radio links to connect personnel and area monitors to a central network. This also means there is no limit to the number of devices that can connect to one another on a network.

Area monitoring has never been more straightforward or considerate of your needs.

# **SPECIFICATIONS**

#### Gas cartridge features

High Gas Alert, Low Gas Warning Under limit, Over limit Time-weighted average (TWA) Short-term exposure limit (STEL) High gas alert, Low gas alert Bump test and calibration notification Bump test and calibration failure

#### Safety features

**SOS latch:** Pull latch to trigger SOS alert Low-battery: Configurable threshold Connection lost: Configurable threshold Two-way voice calls: Receive voice calls from monitoring personnel

Text messages: Send and receive messages with monitoring personnel

#### **Convenience features**

Set-up Wizard

Connection lost alarm: Configurable time period Siren volume setting: Three levels available Text messaging: Custom messages and 10 pre-configured Maintenance code: Configurable 4 digits

Push to Talk Communication

#### **User interface**

Display: 4.4 inch diagonal, 480 by 640 pixel, eight-color active matrix liquid crystal display Menu system: driven by three-button keypad Power button: On/off

SOS latch: Send SOS alert

Multi-language support: (EN, FR, ES, DE, IT, NL, PT)

#### **User notification**

Green connectivity light: Blinking (powered), continuous (connected)

360° visible yellow and red lights

Yellow light: pending and warning alarms

Red light: Red alerts

Blue LiveResponse light: Confirmation that a monitoring team has acknowledged the alert Siren sound: High-volume alarm siren. Optional siren accessory available through interface ports.

#### Four-channel pump module\*

Optional module: Yes Number of pump channels: 4 Sampling period per channel: Adjustable

Tubing length per channel: Up to 100 ft (30 m)

#### Interface ports

Intrinsically safe, configurable external signal ports designed to integrate with external alarms and electrical systems.

#### **Power & battery**

Rechargeable battery capacity: 144 Ah (LiFePO<sub>4</sub>) Battery life in diffusion mode:

100 days at 20°C (68°F), LEL-IR, H2S, CO and O2 config.

Battery life in pump mode: 30 days at 20°C (68°F) Charge time: 8-12 hrs

Charge temp.: 0°C to 45°C (32°F to 113°F)

#### IS trickle charge port

Can be used to hard-wire an IS power supply to run EXO indefinitely.

#### Size & weight

Size: 385 mm x 188 mm x 220 mm (15.1" x 7.4" x 8.7")

Weight: 12.25kg/27 lbs

Material: Rugged housing built from cast aluminum,

plastic and rubberized bumpers

#### Cellular wireless radio

Wireless coverage: 100 countries, 200 wireless carriers North America: 3G/4G radio; 3G UMTS bands 2 and 5;

4G bands 2, 4 and 5

International: 2G/4G radio; 2G GSM bands E-GSM and

PCS; 4G bands 3, 7 and 20

Asia Pacific: 3G/4G radio; 3G UMTS band 1; 4G bands

3.8 and 28 Antenna: Internal

#### Satellite module

User-upgradeable add-on: User-upgradeable satellite module allows EXO to connect to the iridium satellite network for remote

areas outside of cellular connectivity. Network: Iridium, global coverage Radio: 1621 MHz, 2 Watts

Antenna: Internal

#### Wireless updates

Device configuration changes: Yes Device firmware upgrade OTA: Yes

#### Location technology

Multi-constellation: GPS/QZSS, Galileo, Beidou

Receiver type: 72-channel Assisted-GNSS: Yes

GNSS Accuracy: 5m (16feet), CEP 50%, 24 hours static

#### **Environmental**

Storage temp.: -40°C to 60°C (-40°F to 140°F) Operating temp.: -20°C to 50°C (-4°F to 122°F) Ingress protection: Designed to meet IP65

#### **Approvals**

RoHS, CE, RCM

Canada & USA: Class I Division 1 Group A,B,C,D T3;

Class I Zone 0 AEx ia IICT3; Ex ia IICT3 Ga

**IECEx:** Ex ia IIC T3 Ga ATEX: Ex ia IIC T3 Ga

LEL: CSA C22.2 No.152; ISA 12.13.01

FCC ID: W77EXO IC: 8255A-FXO

Contains: FCC ID: XPY1EIQ24NN, Q639603N

IC: 8585A-1EIQ24NN, 4629A-9603N

## **Blackline Live web application**

Cloud-hosted safety monitoring web application is highly customizable for every customer requirement. Includes live map, employee address book, user roles, alert management, device configurations, alert setups and reporting.

## Accessories

IS solar panel, IS trickle charger, low tripod and tall survey tripod, universal mount, carrying case

# Warranty

Three-year hardware warranty Extended warranty available

### Gas sensors

Gas	Sensor type	Sensor model	Range	Resolution
Ammonia (NH <sub>3</sub> )	Electrochemical	Citytech, Sensoric NH3 3E 100 SE	0–100 ppm	0.1 ppm
High-range ammonia (NH <sub>3</sub> )	Electrochemical	Sensoric NH3 E3 500 SE	0-500 ppm	1 ppm
Carbon monoxide (CO)	Electrochemical	Citytech, 4CF+	0-500 ppm	1 ppm
High-range carbon monoxide (CO)	Electrochemical	Citytech 4CM	0–2000 ppm	5 ppm
Hydrogen resistant carbon monoxide (CO-H)	Electrochemical	Citytech 2CF3	0–500 ppm	1 ppm
Carbon dioxide (CO <sub>2</sub> )	NDIR	Gas Sensing Solutions, ExplorIR-M	0-50,000 ppm	50 ppm
Chlorine (Cl <sub>2</sub> )	Electrochemical	Citytech, Sensoric Cl2 3E 50	0–20 ppm	0.1 ppm
Chlorine dioxide (CIO <sub>2</sub> )	Electrochemical	Sensoric CIO2 3E 1 O	0–2 ppm	0.01 ppm
Carbon monoxide + hydrogen sulfide (COSH)	Electrochemical	Citytech, 4COSH Dual Gas CO/H₂S Sensor	0–500 ppm CO, 0–100 ppm H <sub>2</sub> S	1 ppm CO, 0.1 ppm H₂S
Hydrogen cyanide (HCN)	Electrochemical	Sensoric HCN 3E 30 F	0-30 ppm	0.1 ppm
Hydrogen sulfide (H <sub>2</sub> S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulfide CiTiceL	0–100 ppm	0.1 ppm
High-range hydrogen sulfide (H <sub>2</sub> S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulfide CiTiceL	0-500 ppm	0.5 ppm
LEL-MPS (LEL-M)	Molecular property spectrometer	NevadaNano LEL-MPS	0-100% LEL	0.1% LEL
Nitrogen dioxide (NO <sub>2</sub> )	Electrochemical	City Technology, 4ND	0-50 ppm	0.1 ppm
Oxygen (O <sub>2</sub> )	Pumped electrochemical	City Technology, 40xLL Longlife Oxygen CiTiceL	0-25% vol	0.1% vol
Photoionization (PID) ppm	PID	Ion Science, MiniPID 2	0–4,000 ppm	Dynamic resolution**, 0.1 ppm
Sulfur dioxide (SO <sub>2</sub> )	Electrochemical	City Technology, 4S Rev. 2 Sulfur Dioxide CiTiceL	0–100 ppm	0.1 ppm