



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

*Coming 2021

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
Tumble Alarm

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 pressure: ~90 dB at 11.8in (30 cm), 95 dB at 6in (15 cm). Optional 110 dB 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 (LiFePO₄)
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 IIC T3; Ex ia IIC T3 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-EXO

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 ₃)	Electrochemical	Citytech, Sensoric NH3 3E 100 SE	0-100 ppm	0.1 ppm
High-range ammonia (NH ₃)	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 ₂)	NDIR	Gas Sensing Solutions, ExplorIR-M	0-50,000 ppm	50 ppm
Chlorine (Cl ₂)	Electrochemical	Citytech, Sensoric Cl2 3E 50	0-20 ppm	0.1 ppm
Chlorine dioxide (ClO ₂)	Electrochemical	Sensoric ClO2 3E 1 O	0-2 ppm	0.01 ppm
Carbon monoxide + hydrogen sulfide (COSH)	Electrochemical	Citytech, 4COSH Dual Gas CO/H ₂ S Sensor	0-500 ppm CO, 0-100 ppm H ₂ S	1 ppm CO, 0.1 ppm H ₂ S
Hydrogen cyanide (HCN)	Electrochemical	Sensoric HCN 3E 30 F	0-30 ppm	0.1 ppm
Hydrogen sulfide (H ₂ S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulfide CiTiceL	0-100 ppm	0.1 ppm
High-range hydrogen sulfide (H ₂ 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
LEL-infrared (LEL-IR)	NDIR	MIPEX, 02-X-X-X.1	0-100% LEL	1% LEL
Nitrogen dioxide (NO ₂)	Electrochemical	City Technology, 4ND	0-50 ppm	0.1 ppm
Oxygen (O ₂)	Pumped electrochemical	City Technology, 4OxLL Longlife Oxygen CiTiceL	0-25% vol	0.1% vol
Photoionization (PID) ppm	PID	Ion Science, MiniPID 2	0-4,000 ppm	Dynamic resolution**
Sulfur dioxide (SO ₂)	Electrochemical	City Technology, 4S Rev. 2 Sulfur Dioxide CiTiceL	0-100 ppm	0.1 ppm