Features

- 100+ day battery life

- Diffusion and combination diffusion / pump model options

- Internal 2G/3G/4G wireless works in 100+ countries

- Works globally with optional Iridium satellite communication

- 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

- Uses the same plug-and-play gas sensor cartridges as G7c

- Blackline Analytics automates compliance reporting

- Internal GPS and beacon location technology

- Manage G7 Exo area monitors in Blackline Live alongside G7c personal monitors

G7 EXO

MOVE YOUR AREA MONITORING PROGRAMME INTO THE CLOUD

Blackline revolutionised personal gas monitoring with the introduction of G7c, the world's only detector with integrated cellular communications and two-way voice calling to a live monitoring team. Delivering a broad range of gas detection and real-time safety features, G7c is the most connected gas detection instrument on the market.

We are changing the gas detection world again. Introducing G7 Exo — the world's first cloud-connected area monitor with integrated 2G/3G/4G communications. From the moment G7 Exo is turned on, it automatically connects directly to the Blackline Safety Cloud and delivers a complete situational view to businesses. G7 Exo defines the ideal cloud-connected area monitor for facilities, maintenance projects, tank farms, fencelines, drilling rigs and disaster responses.

Unlike competitor solutions, G7 Exo area monitors do not need to be set up with a line of sight between each other. No more changing batteries every few days either. G7 Exo combines 100+ days of battery run-time and integrated communications for seamless remote configuration and monitoring.

PRELIMINARY SPECIFICATIONS (SUBJECT TO CHANGE)

Gas cartridge features
Under and over limit alerts
Time-weighted average (TWA)
Short-term exposure limit (STEL)
Low and high gas alerts
Bump test and calibration notification
Bump test and calibration failure

User interface
Display: 480 by 640 pixel, eight-colour active matrix liquid crystal display
Menu system: driven by three-button keypad,
Power button: On/off
SOS latch: Send emergency alert
Multi-language support: (EN, FR, ES, DE, IT, NL, PT)

User notification
Green connectivity light: Blinking (powered), continuous (connected)
360-degree visible yellow, red and blue lights
Yellow light: pending and warning alarms
Red light: Red alert communicated
Blue LiveResponse light: Confirmation that a monitoring team has acknowledged the alert
Alarm sound pressure: ~100 dB @ 30 cm (11.8")
Two-way voice calling sound pressure: ~95 dB @ 30 cm (11.8")

Pump model
Number of pump channels: 4
Sampling period per channel: Adjustable
Tubing length per channel: Up to 30 m (100 ft)

Input / output ports
Intrinsically safe, highly configurable external signal ports designed to integrate with external alarms and electrical systems.
Intrinsic safety specification: TBD

Power & battery
Rechargeable battery capacity: 144 Ah (LiFePO$_4$)
Battery life in diffusion mode:
100 days at 20°C (68°F), LEL-IR, H$_2$S, CO and O$_2$ config.
Battery life in pump mode:
30 days at 20°C (68°F), LEL-IR, H$_2$S, CO and O$_2$ config.
Charge time: TBD
Intrinsically safe trickle-charging port: Yes, supports G7 Exo continuous operation

Cellular wireless radio
Coverage: 100+ countries and 200+ carriers
Europe: 2G/3G or 2G/4G
North America: 2G/3G or 3G/4G
Australia/New Zealand: 2G/3G or 3G/4G
Antenna: Regionally optimised
Band specifications: TBD

Satellite wireless radio option
User-upgradeable add-on: Yes
Network: Iridium, global coverage

Wireless updates
Device configuration changes: Yes
Device firmware upgrade OTA: Yes

Location technology
GPS radio: 48-channel high sensitivity
Assisted-GPS: Yes
GPS accuracy: ~5 m (16 ft) outdoors, open sky
Location beacon radio: Yes, Blackline's proprietary location beacon technology and floor/site plans

Size & weight
Material: Rugged housing built from aluminum, plastic and rubberized bumpers
**Size:** 385 mm x 188 mm x 220 mm (15.1" x 7.4" x 8.7")
Weight: 9.5 kg (21 lb)

Environmental
Storage temp.: -40°C to 60°C (-40°F to 140°F)
Operating temp.: -40°C to 55°C (-40°F to 131°F)
Charging temp.: 0°C to 45°C (32°F to 113°F)
Ingress protection: Designed to meet IP65

Approvals (targeted)
RoHS, CE, RCM
Canada & USA: Class I Division 1 Group A,B,C,D T4; ℠ⓤ
Class I Zone 0 AEx da ia IIC T4; Ex da ia IIC T4 Ga
IECEx: Ex da ia IIC T4 Ga
ATEX: Ex da ia IIC T4 Ga CE ⟨Ex⟩ II 1 G
LEL: CSA C22.2 No.152; ISA 12.13.01

Accessories
Solar panel for continuous monitoring. Mounting options include wall, tripod, anti-tip, magnetic and rail/scaffold mounts

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

Warranty
G7 Exo area monitor: three-year hardware warranty
Gas sensors and pumps: lifetime warranty with active service plan
Blackline Complete lease option: provides comprehensive warranty for full three-year term

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+ CiTiceL	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, MinIR	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
COSH	Electrochemical	Citytech, 4COSH Dual Gas CO/H2S Sensor	0–500 ppm CO, 0–100 ppm H2S	1 ppm CO, 0.1 ppm H2S
Hydrogen H$_2$)	Electrochemical	Citytech, H23E4	0–40,000 ppm	1% LEL (400 ppm H2)
Hydrogen cyanide (HCN)	Electrochemical	Sensoric HCN 3E 30 F	0–30 ppm	0.1 ppm
Hydrogen sulphide (H$_2$S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulphide CiTiceL	0–100 ppm	0.1 ppm
High-range hydrogen sulphide (H$_2$S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulphide CiTiceL	0-500 ppm	0.5 ppm
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
Ozone (O$_3$)	Electrochemical	Sensoric O3 3E 1	0–1 ppm	0.01 ppm
Photoionisation (PID) ppm	PID	Ion Science, MiniPID 2	0–4,000 ppm*	Dynamic resolution*
Photoionisation (PID) ppb	PID	Ion Science, MiniPID 2	0-10,000 ppb*	Dynamic resolution*
Sulphur dioxide (SO$_2$)	Electrochemical	City Technology, 4S Rev. 2 Sulphur Dioxide CiTiceL	0–100 ppm	0.1 ppm