# blacklinesafety

# DATA SHEET





## THE WORLD'S HARDEST-WORKING CONNECTED MONITOR.

Blackline Safety's G7c leverages integrated LTE/3G-cellular connectivity to wirelessly link your team to real people, while automating data analytics and compliance reporting. Should a gas leak, injury or health event occur, G7c confidently accounts for everyone's well-being and whereabouts in real-time, so no call for help ever goes unanswered.

G7c automatically watches over employees and lone workers. All safety incidents are communicated to live monitoring personnel who can mobilize responders to an employee's exact location or trigger an evacuation in real-time. With a two-way speakerphone, monitoring personnel can communicate directly with the worker, providing critical insights and situational awareness for optimized emergency responses.

G7c delivers an exclusive customizable modular design, delivering the ability to expand functionality with a range of plug-and-play cartridges and a range of gas sensors. Choose from a Standard, Singlegas, Multi-gas diffusion or Multi-gas pump cartridge to address the needs of your work environment — everything is completely configurable to meet the needs of every industry, application and scenario.

G7c devices collect more data than ever before, automatically streaming it to the Blackline Safety Network when in areas of cellular coverage. All event and alert data is time and location-stamped, powering our Blackline Analytics reporting platform. Bump test and calibration data is also communicated seamlessly, for live compliance visibility and reporting. Teams can easily analyze their data without ever having to manually collect and compile anything. G7c does it all, so you don't have to.

.....



## **Features**





Fall detection No-motion detection





Two-way voice and text messaging

Push-to-talk





SOS alert





Assisted-GPS

Indoor location technology





Gas alarms

Configuration modes



Blackline Analytics reporting platform



Blackline Live safety monitoring portal

www.BlacklineSafety.com

# DETAILED SPECIFICATION

## Standard G7 safety features

Fall detection and No-motion detection: Tri-axis accelerometer, tri-axis gyro, software processing, configurable sensitivity, configurable time for nomotion

SOS latch: Pull latch to trigger SOS alert Silent SOS: Press and hold latch to trigger SOS alert

Low-battery: Configurable threshold Worker check-in: Configurable timer (30 – 180 min, or off), automatic check-in when driving

### Additional gas cartridge features

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

## Size & weight

**Under limit** 

G7 with Standard Cartridge

Size: 64 mm x 124 mm x 27 mm (2.5" x 4.9" x 1.1")

Weight: 162 g (5.7 oz) G7 with Single-gas Cartridge

Size: 64 mm x 128 mm x 27 mm (2.5" x 5.0" x 1.1")

Weight: 167 g (5.9 oz)

G7 with Multi-gas diffusion Cartridge

Size: 66 mm x 150 mm x 27 mm (2.5" x 5.9" x 1.1")

Weight: 192 g (6.8 oz)

G7 with Multi-gas pump Cartridge

Size: 66 mm x 151 mm x 38.5 mm (2.6" x 5.95" x 1.52")

Weight: 238 g (8.4 oz)

## **User interface**

168 by 144 pixel graphical, high contrast, liquid crystal display with front lighting, menu system driven by three-button keypad, power button (on/off), check-in button (check-in/silent SOS), SOS latch (send emergency alert)

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

## **User notification**

Green SureSafe® light: Blinking (powered),

continuous (connected)

Yellow top and front lights: Yellow pending alarm and yellow warning alarm

Red top and front lights: Red alert communicated Blue LiveResponse<sup>™</sup> top and front lights:

Confirmation that a monitoring team has

acknowledged the alert Alarm Indicators: Speaker, LED lights and

vibration motor Speaker sound pressure level: ~95 dB @ 30 cm (~95 dB @ 11.8")

Voice calling: Speakerphone and phone modes (G7c model only)

## **Power & battery**

Rechargeable Li-ion battery: 1100 mAh Li-ion Battery Life: 18 hours at 20°C (68°F) under normal usage Charge time: 4 hours

## **Approvals**

G7c: SAR, RoHS, CE, RCM Unit ID: 3570xxxxxx

Contains FCC ID: XPY1EIQ24NN, IC: 8595A-1EIQ24NN

Unit ID: 3567xxxxxx

FCC ID: W77G7C IC: 8255A-G7C

Contains FCC ID: XPY1CGM5NNN, IC: 8595A-1CGM5NNN

Unit ID: 3566xxxxxx

Contains FCC ID: XPY1CGM5NNN, IC: 8595A-1CGM5NNN

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

LEL: CSA C22.2 No.152; ISA 12.13.01 LEL Pump Cartridge: CSA C22.2 No.152; 0°C ≤ Ta ≤  $40^{\circ}\text{C}$ ; ANSI/ISA-12.13.01;  $-10^{\circ}\text{C} \le \text{Ta} \le 40^{\circ}\text{C}$ 

#### G7c wireless radio

Wireless coverage: 100 countries, 200 wireless carriers North America: 2G/3G radio, GSM 850 MHz, PCS 1900 MHz, 3G UMTS bands 2, 5 and 6 | 3G/4G radio, 3G UMTS bands 2, 5. 4G bands 2, 4, 5, 12

Europe: 2G/3G radio, E-GSM 900 MHz, DSC 1800 MHz, 3G UMTS bands 1 and 8 || 2G/4G radio, E-GSM 900 MHz,

DSC 1800 MHz. 4G Bands 3, 7, 20 Antenna: Internal regionally optimized

## Location technology

GPS Radio: 48-channel high sensitivity Assisted-GPS: Yes (G7c model only) GPS Accuracy: ~5 m (16 ft) Outdoors

Indoor location technology: Blackline Safety location

Location update frequency: G7c 5 min, G7x 15 min defaults

#### **Environmental**

Storage temperature: -30°C to 60°C (-22°F to 140°F) Operating temperature: -20°C to 55°C (-4°F to 131°F) Charging temperature: 0°C to 45°C (32°F to 113°F) Ingress Protection: Designed to meet IP67

#### Warranty

G7: two years limited warranty Cartridges: lifetime with service plan

Blackline Complete: three year operating lease with

three year warranty

### Blackline Live web application

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

#### 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 (NH₃)	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 <sub>2</sub> )	NDIR	Gas Sensing Solutions, MinIR	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 (ClO <sub>2</sub> )	Electrochemical	Sensoric ClO2 3E 1 O	0–2 ppm	0.01 ppm
COSH	Electrochemical	Citytech, 4COSH Dual Gas CO/ H <sub>2</sub> S Sensor	0–500 ppm CO, 0–100 ppm H₂S	1 ppm CO, 0.1 ppm H <sub>2</sub> S
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 (H₂S)	Electrochemical	City Technology, 4HS+ Hydrogen Sulfide CiTiceL	0-500 ppm	0.5 ppm
LEL-MPS <sup>TM</sup> See Blackline's LEL-MPS datasheet for more information	Molecular property spectrometer <sup>TM</sup>	Nevada Nano, 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 <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
Ozone (O <sub>3</sub> )	Electrochemical	Sensoric O3 3E 1	0–1 ppm	0.01 ppm
Photoionization (PID) ppm	PID	Ion Science, MiniPID 2	0-4,000 ppm*	Dynamic resolution*
Sulfur dioxide (SO <sub>2</sub> )	Electrochemical	City Technology, 4S Rev. 2 Sulfur Dioxide CiTiceL	0–100 ppm	0.1 ppm