



Features



Fall detection



No-motion detection



Messaging



Gas alarms



SOS alert



Check-in



GPS location



Indoor location compatible



Satellite Connectivity

# G7x

## ALARMS DON'T SAVE PEOPLE. PEOPLE SAVE PEOPLE.

Blackline Safety's G7x uses 3G cellular and satellite networks to connect your team to real people. G7x confidently accounts for everyone's wellbeing and whereabouts in real-time to equip live monitoring personnel when someone needs a hand, in even the most remote locations.

The G7x system includes the G7x user-worn device and G7 Bridge portable satellite and cellular base station. Leveraging 3G and Iridium satellite networks, remote teams are wirelessly monitored by real people. Connectivity seamlessly transitions to satellite when cellular becomes unavailable, for true last-mile monitoring. G7x communicates with G7 Bridge through an industrial-quality 900 MHz radio link from up to 2 km away. G7 Bridge connects with the Blackline Safety Network and monitoring teams using available 3G or satellite connections.

G7x automatically watches over workers and calls for help even when the employee can't. All safety incidents are communicated to 24/7 monitoring personnel who can mobilize responders to an employee's exact location or trigger an evacuation in real-time. Constant connectivity provides critical insights and situational awareness for optimized emergency responses.

G7x delivers an exclusive, customizable and modular design. Gas detection is tailored to work environments with a selection of cartridges and sensors. Everything is completely configurable to meet the needs of every industry, application and scenario. Bump test and calibration data is communicated automatically to Blackline's monitoring portal for real-time compliance visibility and reporting. Wireless connectivity ensures that each G7x is remotely configurable and firmware updates are automatic. From onset of an incident through to resolution, all activities are time-stamped for future reporting.

# DETAILED SPECIFICATION

## Standard G7 Safety Alert Features

All safety alerts are transmitted immediately to the Blackline Safety Network

**Fall detection and No motion detection:** Tri-axis accelerometer, tri-axis gyro, software processing, configurable sensitivity, configurable time window (1-30 mins, or off) for no motion detection

**Emergency latch:** Pull latch to trigger remote alert

**Silent emergency:** Press and hold latch to trigger remote alert

**Low-battery:** configurable threshold

**Worker check-in:** Configurable timer (5–180 min, or off), automatic check-in when driving

## Additional Safety Features Available with Gas Cartridges

All gas alerts are transmitted immediately to the Blackline Safety Network

**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 alert**

## Size & Weight

**G7 with Standard Cartridge**

**Size:** 64 mm x 124 mm x 27 mm (2.52" x 4.88" x 1.06")

**Weight:** 162 g (5.7 oz)

**G7 with Single-gas Cartridge**

**Size:** 64 mm x 128 mm x 27 mm (2.52" x 5.04" x 1.06")

**Weight:** 167 g (5.9 oz)

**G7 with Quad-gas Cartridge**

**Size:** 66 mm x 150 mm x 27 mm (2.52" x 5.91" x 1.06")

**Weight:** 192 g (6.8 oz)

## Single-gas and Quad-gas Sensor Options

H<sub>2</sub>S, LEL, CO, O<sub>2</sub>, CO<sub>2</sub>, NH<sub>3</sub>

**H<sub>2</sub>S (Hydrogen Sulfide)**

**Sensor type:** Electrochemical

**Lowest detection limit:** 0.5 ppm

**Upper detection limit:** 50 ppm

**Resolution:** 0.1 ppm

**LEL combustible**

**Sensor type:** Infrared

**Lowest detection limit:** ±4 %LEL

**Upper detection limit:** 100 %LEL

**Resolution:** 1 %LEL

**CO (Carbon Monoxide)**

**Sensor type:** Electrochemical

**Lowest detection limit:** 1 ppm

**Upper detection limit:** 500 ppm

**Resolution:** 1 ppm

**O<sub>2</sub> (Oxygen)**

**Sensor type:** Pumped electrochemical

**Lowest detection limit:** 0.1 %vol

**Upper detection limit:** 25.0 %vol

**Resolution:** 0.1 %vol

**CO<sub>2</sub> (Carbon Dioxide)**

**Sensor type:** Infrared

**Lowest detection limit:** 50 ppm

**Upper detection limit:** 50000 ppm

**Resolution:** 50 ppm

**NH<sub>3</sub> (Ammonia)**

**Sensor type:** Electrochemical

**Lowest detection limit:** 0.5 ppm

**Upper detection limit:** 100.0 ppm

**Resolution:** 0.1 ppm

## User Interface

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

## User Notification

**Green SureSafe® light:** Blinking (powered), continuous (connected)

**Yellow top and front lights:** Personal pending alarm and personal warning alarm

**Red top and front lights:** Remote alert communicated

**Blue LiveResponse™ top and front lights:** Monitoring team confirmation that alert has been acknowledged

**Personal alarm indicators:** speaker, LEDs and vibration motor

## G7x Wireless Radio

Works with G7 bridge satellite base station

**Radio:** 902.0–928.0 MHz, 1 Watt

**Antenna:** Internal

**Radio link range:** 2 km (1.25 mi) real-world

## Wireless Updates

**Device configuration changes:** Yes,

**Device firmware upgrade over-the-air (FOTA):** Yes

## Location Technology

**GPS Radio:** 48-channel high sensitivity

**Assisted-GPS:** Yes

**GPS Accuracy:** ~5 m (16 ft) Outdoors

**Indoor location technology:** Blackline Safety location beacons

**Location update frequency:** G7c 10 sec, G7x 15 min

## Power & Battery

**Rechargeable Li-ion battery:** 1250 mAh Li-ion

**Battery Life:** 18 hours continuous operation at 20°C (68°F)

**Charge time:** 4 hours

## Environmental

**Storage temperature:** -30°C to 75°C (-22°F to 167°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:** IP67\*

## Approvals\*

SAR, RoHS, RCM

FCC ID: W77G7X | IC ID: 8255A-G7X

Canada and USA: Class I Division 1 Gr A,B,C,D T4;

Class I Zone 0 AEx ia IIC T4; Ex ia IIC T4 Ga 

IECEX: Ex ib IIC T4 Gb

## Warranty

**G7:** two years

**Cartridges:** Lifetime

**G7 complete plan:** three years

## 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.

*All specifications subject to change without notice.*

*\*All approvals pending*

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