COMM-CO
Communication today and tomorrow

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_2S, LEL, CO, O_2, CO_2, NH_3

H_2S (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_2 (Oxygen)
Sensor type: Pumped electrochemical
Lowest detection limit: 0.1 %vol
Upper detection limit: 25.0 %vol
Resolution: 0.1 %vol

CO_2 (Carbon Dioxide)
Sensor type: Infrared
Lowest detection limit: 50 ppm
Upper detection limit: 50000 ppm
Resolution: 50 ppm

NH_3 (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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