blacklinesafety

G7ˣ + G7 BRIDGE

THE WORLD'S HARDEST-WORKING PERSONAL MONITOR WITH LAST-MILE CONNECTIVITY

Blackline Safety's G7x system uses integrated satellite and cellular connectivity to wirelessly link employees and lone workers to real people, while automating data analytics and compliance reporting. Should a gas leak, injury or health event occur, G7x confidently accounts for everyone's well-being and whereabouts in real-time, so no call for help ever goes unanswered — even in the most remote locations. 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. Featuring two-way messaging, personnel can communicate directly with the worker.

With a modular design, our G7x system delivers exclusive customizability. Gas detection is tailored to work environments with a selection of plug-and-play cartridges and sensors — with all features being completely configurable.

Blackline devices collect more data than ever before available, automatically streaming it to the Blackline Safety Network. 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 it themselves.

G7 Bridge

The G7x system includes the G7x user-worn device and G7 Bridge portable satellite and cellular base station. Leveraging 3G and Iridium satellite networks, connectivity seamlessly transitions to satellite when cellular becomes unavailable, providing true last-mile monitoring. Up to five G7x devices connect with G7 Bridge through an industrial-quality 900 MHz radio link from up to 2 km away. G7 Bridge can mass-notify employees of the need to evacuate and connect workers to monitoring personnel via two-way messaging. G7 Bridge is self-powered and portable, allowing users to quickly move it from one vehicle to another. It has your teams' back — at all times, no matter their location.

Features

Fall detection

No-motion detection

Two-way text messaging

Gas alarms

SOS alert
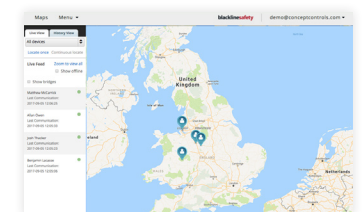
Check-in

Assisted-GPS

Indoor location technology

Dual mode communications

Configuration modes

Blackline Analytics reporting platform

Blackline Live safety monitoring portal

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 no-motion
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

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

Size & weight

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™ 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")

G7x Wireless Radio

Works with G7 Bridge satellite base station
Radio: 902.0 – 928.0 MHz, 1 Watt
AS/NZ Radio: 915.0-928.0 MHz
Antenna: Internal
Radio link range: 2 km (1.25 mi)

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

Power & battery

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

Environmental

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

Approvals

G7x: SAR, RoHS, 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 ib IIC T4 Gb

LEL: CSA C22.2 No.152; ISA 12.13.01
LEL Pump Cartridge: CSA C22.2 No.152; 0℃ ≤ Ta ≤ 40℃; ANSI/ISA-12.13.01; -10℃ ≤ Ta ≤ 40℃

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 highly customizable for every customer requirement. Includes live map, employee address book, user roles, alert management, device configurations, alert setups and reporting.

Gas sensors

Gas	Sensor type	Range	Resolution
Ammonia (NH₃)	Electrochemical	0–100 ppm	0.1 ppm
High-range ammonia (NH₃)	Electrochemical	0–500 ppm	1 ppm
Carbon monoxide (CO)	Electrochemical	0–500 ppm	1 ppm
High-range carbon monoxide (CO)	Electrochemical	0–2000 ppm	5 ppm
Hydrogen resistant carbon monoxide (CO-H)	Electrochemical	0–500 ppm	1 ppm
Carbon dioxide (CO₂)	NDIR	0–50,000 ppm	50 ppm
Chlorine (Cl₂)	Electrochemical	0–20 ppm	0.1 ppm
Chlorine dioxide (ClO₂)	Electrochemical	0-2 ppm	0.01 ppm
COSH	Electrochemical	0–500 ppm CO, 0–100 ppm H₂S	1 ppm CO, 0.1 ppm H₂S
Hydrogen cyanide (HCN)	Electrochemical	0–30 ppm	0.1 ppm
Hydrogen sulfide (H₂S)	Electrochemical	0–100 ppm	0.1 ppm
High-range hydrogen sulfide (H₂S)	Electrochemical	0-500 ppm	0.5 ppm
LEL-infrared (LEL-IR)	NDIR	0–100% LEL	1% LEL
Oxygen (O₂)	Pumped electrochemical	0–25% vol	0.1% vol
Ozone (O₃)	Electrochemical	0-1 ppm	0.01 ppm
Photoionization (PID)	PID	0–6,000 ppm	0.1 ppm (0–100 ppm), 2 ppm (100–6,000 ppm)
Sulfur dioxide (SO₂)	Electrochemical	0–100 ppm	0.1 ppm

Authorised distributor

In Australia:
For customer service, call 1300-735-292
To email an order, ordersau@thermofisher.com
To order online: thermofisher.com

In New Zealand:
For customer service, call 0800-933-966
To email an order, ordersnz@thermofisher.com
To order online: thermofisher.com

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