



G7c

THE WORLD'S HARDEST-WORKING CONNECTED MONITOR

Blackline Safety's G7c leverages integrated 4G/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.

The moment something happens, safety incident data is 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 to provide comfort while also gathering 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, Single-gas, 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.

With G7c, you have access to more information than ever before. Usage and event data automatically streams to the cloud when in areas of cellular coverage. Everything 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



Check-in



Assisted-GPS



Indoor location technology



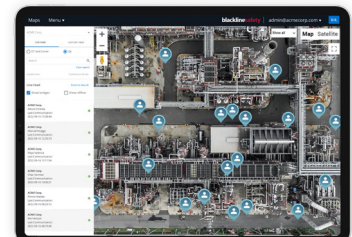
Gas alarms



Configuration modes



Blackline Analytics reporting platform



Blackline Live safety monitoring portal

DETAILED SPECIFICATIONS

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

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 29 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 29 mm (2.52" x 5.04" x 1.06")
Weight: 167 g (5.9 oz)

G7 with Multi-gas diffusion Cartridge

Size: 66 mm x 150 mm x 29 mm (2.52" x 5.91" x 1.06")
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)
Target flow rate: 300ml/min
Maximum tubing length:
 100ft x 0.188" diameter (30.2m x 4.78mm) **or**
 50ft x 0.125" diameter (15.25m x 3.17mm)

Wireless updates

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

User interface

Display: 168 by 144 pixel graphical, high contrast, liquid crystal display with front lighting
Menu system: Driven by three-button keypad
Power button: On/off
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: Operational and low urgency notification
Red top and front lights: High urgency notification
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")
Voice calling: Speakerphone and phone modes (G7c model only)

G7c wireless radio

Wireless coverage: 172 countries, 306 operators
Bands: 4G LTE 1, 12, 13, 18, 19, 2, 20, 26, 28, 3, 38, 39, 4, 40, 41, 5, 7, 8; 3G UMTS 1900, 2100, 850, 900; 2G GSM 850/900/1800/1900
Antenna: Internal regionally optimized

Location technology

GNSS Radio: 72-channel
GPS Radio: 48-channel high sensitivity
Assisted-GPS: Yes (G7c model only)
GPS Accuracy: 5 meters (16 ft), CEP 50%, 24 hours stationary sky view
Indoor location technology: Blackline Safety location beacons
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

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

Warranty

G7: two years limited warranty
Cartridges: lifetime with service plan
Blackline Complete: three year operating lease with three year warranty

Approvals

G7c: SAR, RoHS, CE, RCM
FCC ID: XPYUBX21BE01 **IC:** 8595A-UBX21BE01
Contains FCC ID: XPY1EIQ24NN **IC:** 8595A-1EIQ24NN

Intrinsic Safety

Canada & USA: MC267256; Class I Division 1 Group A,B,C,D T4; Class I Zone 0 AEx da ia IIC T4 Ga; Ex da ia IIC T4 Ga
IECEX: CSA 17.0005X; Ex da ia IIC T4 Ga
ATEX: Sira 17ATEX2083X; Ex da ia IIC T4 Ga
UKCA: CSAE 21 UKEX2217X; 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°C; ANSI/ISA-12.13.01; -10°C ≤ Ta ≤ 40°C

Gas	Sensor type	Range	Resolution
Ammonia (NH ₃)	Electrochemical	0–100 ppm	0.1 ppm
High-range ammonia (NH ₃)	Electrochemical	0–500 ppm	1 ppm
Carbon dioxide (CO ₂)	NDIR	0–50,000 ppm	50 ppm
Carbon monoxide (CO)	Electrochemical	0–500 ppm	1 ppm
Chlorine (Cl ₂)*	Electrochemical	0–20 ppm	0.1 ppm
Chlorine dioxide (ClO ₂)*	Electrochemical	0–2 ppm	0.01 ppm
Combustible-infrared (LEL-IR)	NDIR	0–100% LEL	1% LEL
Combustible MPS (LEL-MPS)*** <small>See Blackline's LEL-MPS datasheet for more information</small>	Molecular property spectrometer™	0–100% LEL	1% LEL
COSH	Electrochemical	0–500 ppm CO, 0–100 ppm H ₂ S	1 ppm CO, 0.1 ppm H ₂ S
High-range carbon monoxide (CO)	Electrochemical	0–2000 ppm	5 ppm
High-range hydrogen sulfide (H ₂ S)	Electrochemical	0–500 ppm	0.5 ppm
Hydrogen cyanide (HCN)	Electrochemical	0–30 ppm	0.1 ppm
Hydrogen fluoride (HF)*	Electrochemical	0–10 ppm	0.1 ppm
Hydrogen resistant carbon monoxide (CO-H)	Electrochemical	0–500 ppm	1 ppm
Hydrogen sulfide (H ₂ S)	Electrochemical	0–100 ppm	0.1 ppm
Nitrogen dioxide (NO ₂)	Electrochemical	0–50 ppm	0.1 ppm
Oxygen (O ₂)	Pumped electrochemical	0–25% vol	0.1% vol
Ozone (O ₃)*	Electrochemical	0–1 ppm	0.01 ppm
Photoionization (PID) ppm	PID	0–4,000 ppm	Dynamic resolution**, 0.1 ppm
Sulfur dioxide (SO ₂)	Electrochemical	0–100 ppm	0.1 ppm

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All specifications subject to change without notice.
 *Not all sensors work with the pump cartridge. **Dependant on correction factor.
 ***Operating pressure: 80 to 120 kPa (11.6 psi to 17.4 psi).

HOW DO I START MY SHIFT?



A: Press the power button and wait for the solid green light

Press once firmly on the power button on G7. When the green connectivity light is solid green, your G7 is transmitting data and your safety is monitored.

WHY IS G7 FLASHING GREEN?



A: You have lost connection to the Blackline Safety Network

Your G7 is trying to connect to the network. When the green connectivity light is solid, G7 is transmitting data and your safety is monitored.

HOW DO I CALL FOR HELP?



A: Pull the red latch if you require assistance

Your device will alert monitoring personnel.

WHY IS G7 BLINKING YELLOW?



A: Your device is asking you to confirm that you are OK

Press the latch once to check-in and silence the beeping. If you are unsure why G7 is in yellow pending alarm, you can read the screen for clarification.

WHY IS G7 RAPIDLY BLINKING YELLOW?



A: G7 Has a message for you.

Read your G7 Screen, it has a message that could be an incoming text message, voice call, network connection interruption, low battery, or a warning alarm regarding gases or sensors.

To silence this alarm, press and hold the up and down arrows for three beep cycles.

WHY IS G7 RAPIDLY BLINKING RED?



A: G7 has communicated to monitoring personnel

G7 has immediately communicated a red alert to monitoring personnel. If you are unsure why G7 is in red alert, you can read the screen for clarification.

To silence this alarm, press and hold the up and down arrows for three beep cycles. This will not cancel the alert communicated to monitoring personnel.

WHY IS G7 FLASHING BLUE?



A: Monitoring personnel have received your remote alert, and are responding by following your emergency protocol

No action is required from you. Monitoring personnel will be contacting you via two-way voice (if enabled) or text message to ensure you are OK. Once monitoring personnel have resolved your alert, the LiveResponse blue light will shut off.

HOW DO I BUMP OR CALIBRATE?



A: Use the up and down arrows to navigate to bump test or calibrate from gas options in the main menu

From there, follow the instructions on G7 screen.

HOW DO I END MY SHIFT?



A: Press and hold the power button

Press and hold the power button on G7. The device will go into the shut down sequence. When the SureSafe light is off, you have been successfully logged off the Blackline Safety Network and your safety is no longer being monitored.

Charge after every shift

Always charge G7 after every shift, and leave charging when not in use.