blacklinesafety

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

Functional settings
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 hose 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: 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")
Voice calling: Speakerphone and phone modes (G7c model only)

G7c wireless radio
Wireless coverage: 100 countries, 200 wireless carriers
North America: : 3G/4G radio, 3G UMTS bands 2 and 5; 4G bands 2, 4 and 5
International: 2G/4G radio, 2G G ESM bands E-GSM and PCS; 4G bands 3, 7 and 20
Antenna: Internal regionally optimized

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

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
Unit ID 3570xxxxxx
FCC ID: W77G7C2 **IC:** 8255A-G7C2
Contains FCC ID: XPY1EIQ24NN **IC:** 8595A-1EIQ24NN
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or
Unit ID 3567xxxxxx
FCC ID: W77G7C **IC:** 8255A-G7C
Contains FCC ID: XPY1CGM5NNN, **IC:** 8595A-1CGM5NNN
or
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°C; ANSI/ISA-12.13.01; -10°C ≤ Ta ≤ 40°C
G7x: SAR, RoHS, RCM
FCC ID: W77G7X **IC ID:** 8255A-G7X
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°C ≤ Ta ≤ 40°C; ANSI/ISA-12.13.01; -10°C ≤ Ta ≤ 40°C

Gas	Sensor type	Sensor model	Range	Resolution
Ammonia (NH₃)	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 (CO₂)	NDIR	Gas Sensing Solutions, MinIR	0–50,000 ppm	50 ppm
Chlorine (Cl₂)*	Electrochemical	Citytech, Sensoric Cl2 3E 50	0–20 ppm	0.1 ppm
Chlorine dioxide (ClO₂)*	Electrochemical	Sensoric ClO2 3E 1 O	0–2 ppm	0.01 ppm
COSH	Electrochemical	Citytech, 4COSH Dual Gas CO/H₂S Sensor	0–500 ppm CO, 0–100 ppm H₂S	1 ppm CO, 0.1 ppm H₂S
Hydrogen cyanide (HCN)	Electrochemical	Sensoric HCN 3E 30 F	0–30 ppm	0.1 ppm
Hydrogen fluoride (HF)*	Electrochemical	Sensoric HF 3E 10 SE	0-10 ppm	0.1 ppm
Hydrogen sulfide (H₂S)	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™ See Blackline's LEL-MPS datasheet for more information	Molecular property spectrometer™	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 (NO₂)	Electrochemical	City Technology, 4ND	0–50 ppm	0.1 ppm
Oxygen (O₂)	Pumped electrochemical	City Technology, 4OxLL Longlife Oxygen CiTiceL	0–25% vol	0.1% vol
Ozone (O₃)*	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**, 0.1 ppm
Sulfur dioxide (SO₂)	Electrochemical	City Technology, 4S Rev. 2 Sulfur Dioxide CiTiceL	0–100 ppm	0.1 ppm

Contact us for more information
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All specifications subject to change without notice.
*Not all sensors work with the pump cartridge. **Dependant on correction factor