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.
**DETAILED SPECIFICATIONS**

**Standard G7 safety features**
- Fall detection and No-motion detection: Tri-axis accelerometer, tri-axis gyroscope, 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 126 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 (2.59” 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**: 300 ml/min
- **Maximum tubing length**: 100 ft or 0.188” diameter (30.2 mm or 4.78 mm) or 50 ft or 0.125” diameter (15.25 mm or 3.17 mm)

**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: Internally optimized

**Location technology**
- GNSS Radio: 72-channel
- GPS Radio: 48-channel high sensitivity
- Assisted-GPS: Yes (G7/c model only)
- GPS Accuracy: ± 5 meters (16 ft), CEP 50%, 24 hours stationary sky view
- Indoor location technology: Blackline Safety location beacon
- Location update frequency: G7x 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 on electronics, six months on rubber, one year on battery
- **Cartridges**: lifetime with service plan

**Blackline Complete**: three year operating lease with three year warranty

<table>
<thead>
<tr>
<th>Gas</th>
<th>Sensor type</th>
<th>Range</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (NH₃)</td>
<td>Electrochemical</td>
<td>0–100 ppm</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>High-range ammonia (NH₃)</td>
<td>Electrochemical</td>
<td>0–500 ppm</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Carbon dioxide (CO₂)</td>
<td>DIFR</td>
<td>0–50,000 ppm</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Carbon monoxide (CO)</td>
<td>Electrochemical</td>
<td>0–500 ppm</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Chlorine (Cl₂)</td>
<td>Electrochemical</td>
<td>0–20 ppm</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>Chlorine dioxide (ClO₂)</td>
<td>Electrochemical</td>
<td>0–2 ppm</td>
<td>0.01 ppm</td>
</tr>
<tr>
<td>Combustible-Infrared (ELI-IR)</td>
<td>DIFR</td>
<td>0–100% LEL</td>
<td>1% LEL</td>
</tr>
<tr>
<td>Combustible MPS (ELI-MPS)**</td>
<td>Molecular property spectrometer™</td>
<td>0–100% LEL</td>
<td>1% LEL</td>
</tr>
<tr>
<td>COSH</td>
<td>Electrochemical</td>
<td>0–500 ppm CO, 0–100 ppm H₂S</td>
<td>1 ppm CO, 0.1 ppm H₂S</td>
</tr>
<tr>
<td>High-range carbon monoxide (CO)</td>
<td>Electrochemical</td>
<td>0–2000 ppm</td>
<td>5 ppm</td>
</tr>
<tr>
<td>High-range hydrogen sulfide (H₂S)</td>
<td>Electrochemical</td>
<td>0–500 ppm</td>
<td>0.5 ppm</td>
</tr>
<tr>
<td>Hydrogen cyanide (HCN)</td>
<td>Electrochemical</td>
<td>0–30 ppm</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>Hydrogen fluoride (HF)</td>
<td>Electrochemical</td>
<td>0–10 ppm</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>Hydrogen resistant carbon monoxide (CO-H)</td>
<td>Electrochemical</td>
<td>0–500 ppm</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Hydrogen sulfide (H₂S)</td>
<td>Electrochemical</td>
<td>0–100 ppm</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>Nitrogen dioxide (NO₂)</td>
<td>Electrochemical</td>
<td>0–50 ppm</td>
<td>0.1 ppm</td>
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<tr>
<td>Oxygen (O₂)</td>
<td>Pumped Electrochemical</td>
<td>0–25% vol</td>
<td>0.1% vol</td>
</tr>
<tr>
<td>Ozone (O₃)</td>
<td>Electrochemical</td>
<td>0–1 ppm</td>
<td>0.01 ppm</td>
</tr>
<tr>
<td>Photoionization (PID) ppm</td>
<td>PID</td>
<td>0–4,000 ppm</td>
<td>Dynamic resolution**, 0.1 ppm</td>
</tr>
<tr>
<td>Sulfur dioxide (SO₂)</td>
<td>Electrochemical</td>
<td>0–100 ppm</td>
<td>0.1 ppm</td>
</tr>
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</table>

**Approvals**
- **G7c**: SAR, RoHS, CE, RCM
- FCC ID: XPYUBX218BE01 IC: 8595A-UBX218BE01
- Contains FCC ID: XPY1EQ42NN IC: 8595A-1EQ42NN

**Intrinsic Safety**
- **Canada & USA**: MC267256, Class I Division 1 Group A,B,C,D
- **T4**: Class I Zone 0 ATEX d a ia IIC T4 Ga, Ex da ia IIC T4 Ga
- **IEEE**: CSA 17.0005X; Ex ia ia IIC T4 Ga
- **ATEX**: Sira 17ATEX2083X; Ex ia ia IIC T4 Ga
- **UKCA**: CSE 17UKEX2071X; Ex ia 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

**Maximum tubing length**: 80 to 120 kPa (11.6 psi to 17.4 psi).

**Operating pressure**: 80 to 120 kPa (11.6 psi to 17.4 psi).

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