blackline**safety**

G7

You can change the future.

Safety theory states that every incident is preventable. But we live in a practical world, limited by time and resources. The key is better leveraging what's available. In an **ever-connected world,** can the safety industry do better while remaining fiscally responsible and practical?

We say yes. For nearly a decade, Blackline Safety has created technology that glues teams together in the workplace and we're about to change the game, again.

Meet the all-new G7c. The next best thing to time travel, it empowers your team to **respond instantly**. It has been meticulously designed using state-of-the-art technology for businesses just like yours to best utilise resources, minimise response time and ultimately make a difference.

Read on—we trust that you'll be impressed. It's all about real-time situational awareness helping you make the difference no matter the scenario playing out before you. Don't fall victim to outdated technology and inefficient methods—**gain control over the safety of your team**.

You may not know them by name — but you've already used their products.

In the 1980's, Cody Slater founded **BW Technologies**. He was a key innovator in the portable gas detection market, introducing the worlds first disposable gas detector and the Rig Rat — the industry's first wireless gas detector. Those were his creations. Cody is now the CEO & Chairman of Blackline Safety.

Dr. John Finbow was a founder of **City Technology**, the world's largest supplier of gas sensors. In the early days, Cody and John collaborated to bring smaller and more affordable gas detectors to market. Dr. Finbow now occupies an influential position on Blackline's board of directors.

Designing the best connected safety technology.

Behind every ground-breaking innovation is a strong foundation. There's no replacement for experience and passion. Just like every successful team, we started out by drafting the best players– setting out to revolutionise the world of safety.

This isn't our first rodeo. The people who make up Blackline have already hand-delivered some of the world's most advanced solutions in communications, location technology and gas detection.

It's not just about the tens of millions we invested into safety monitoring technology or how many cups of coffee helped to inspire our team. You don't have to worry about how we researched customer needs, painstakingly examined user experiences and integrated our discoveries. It's all about the difference that G7c makes for your employees, their families and your organisation.

Work anywhere.

Be in control without being on-location. Accessing Blackline Live™ is as easy as logging into your online banking. G7c and our web-based safety platform fit like a glove—completely configurable for easy, infrastructure-free deployment.

The safety status of every team member is visible at a glance. When things go wrong, world-leading tools and technology are in place to professionally manage the incident in the shortest possible time.

Everything is at your fingertips from alert management and calibration status to real-time gas readings—all updated to the web directly from the G7c. With online device configuration and automatic **over-the-air updates**, your equipment is always current with zero downtime.

With a fully customised emergency response protocol, all your bases are covered. Choose to be notified by call, text or email in the event of an incident or allow our Alarm Receiving Centre partners to professionally manage any alerts. Always be in control, even when you can't physically be there.

Be the first to know
It's simple—log on to your Blackline Live account to view detailed reports and follow up on incidents. Every alert is documented through to resolution so you can know exactly what happened and how it was managed.
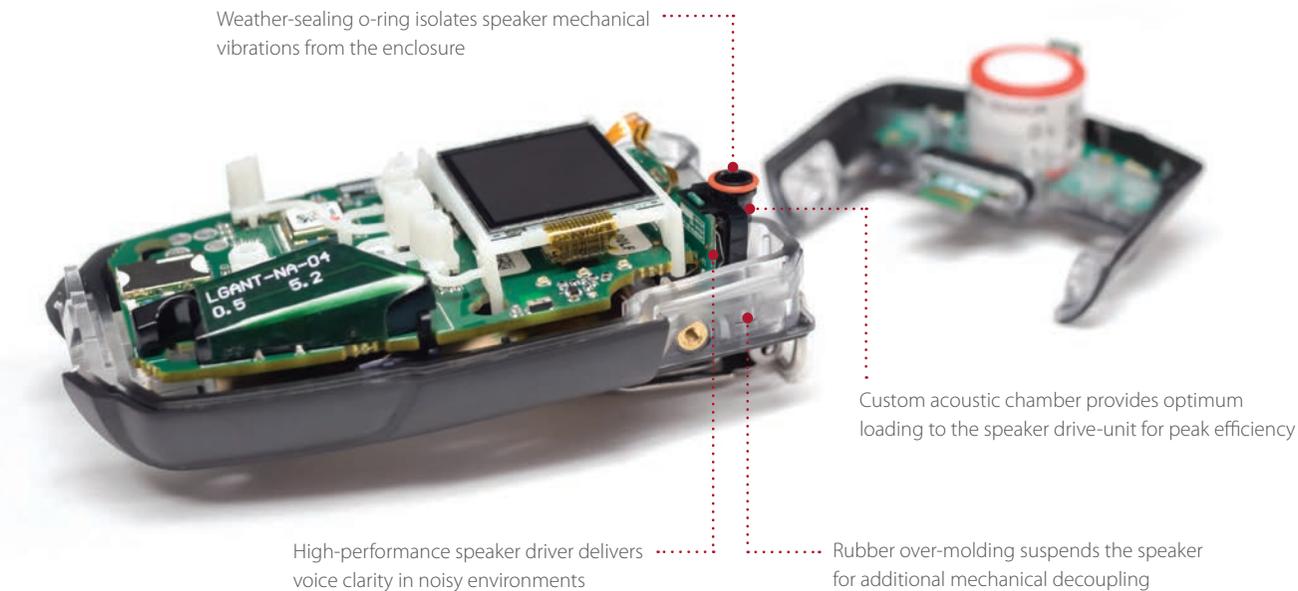
LiveResponse™ light shows help is on the way

Knowledge is your superpower.

"There's been an accident"—words that every safety manager dreads hearing. Decisions must be made in **real-time**, and it's crucial to be informed. Who is involved, what happened, where is everyone and how are you going to manage the situation?

G7c is all about **trust** and ease of use. When the green SureSafe™ light is on, employees know their safety is in good hands. With 2G/3G data communication, employees aren't tethered to expensive Wi-Fi networks or unreliable Bluetooth connections.

Our technology automatically watches over each colleague and calls for help when your employees can't. Slips, trips and falls? Check. Gas exposures? Completely covered. Your workers can also call for help if they run into trouble. In fact, G7c is the only personal monitor to deliver an **industrial-grade speakerphone** that allows monitoring personnel to speak directly with your team with crystal clear sound–even in noisy environments.

Weather-sealing o-ring isolates speaker mechanical vibrations from the enclosure

Custom acoustic chamber provides optimum loading to the speaker drive-unit for peak efficiency

High-performance speaker driver delivers voice clarity in noisy environments

Rubber over-molding suspends the speaker for additional mechanical decoupling
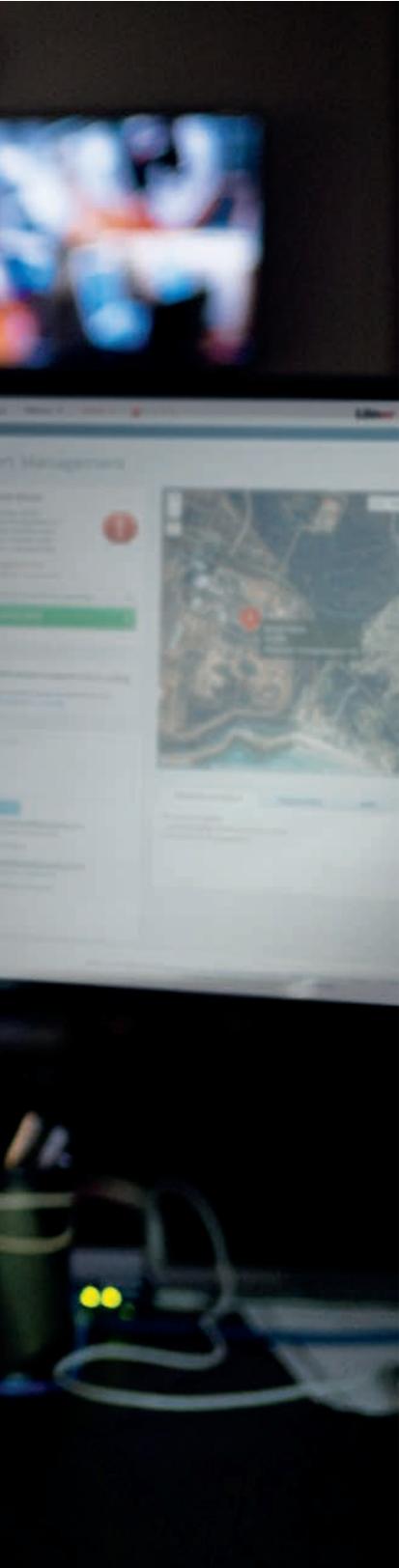
G7c leverages the billions of dollars already spent on global 2G/3G networks.

Why spend millions on reinventing the wheel by installing Wi-Fi networks everywhere your teams work?

G7c works right out of the box—turn it on and your team is instantly monitored.

Alarms don't save people.
People save people.

The G7c is not just another widget. The beauty of G7c is that it connects your team to **real people**. We put the tools in your hands to watch over your own team, or you can leave the monitoring to our 24/7 Alarm Receiving Centre partners.
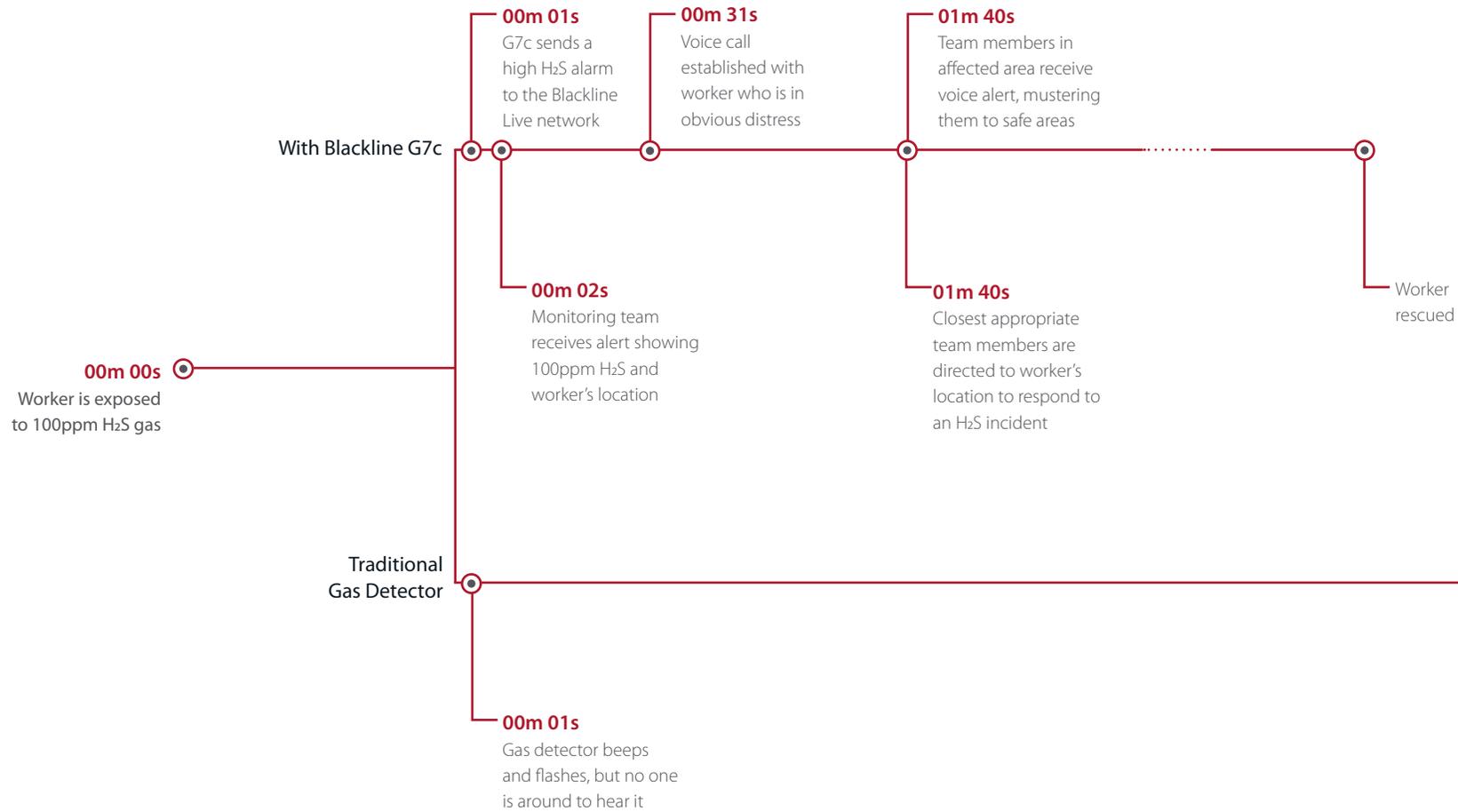
Each alert is managed according to your custom emergency response protocol, from incident through to resolution. All activities are time-stamped for future reporting, including notes that are used to document the response.

Employees who face an incident experience extreme stress. Even if they can't respond to a two-way voice call or text message, G7c **brings them comfort** when the blue LiveResponse™ light turns on—they know the alert was received and help is on the way.

For situations where a hazard needs to be communicated broadly to your team, those monitoring can mass-notify anyone with a G7c through voice and text messages. Confidently account for everyone's wellbeing and whereabouts in real-time, and be equipped to act when someone needs a hand.

G7c services are completely scalable to meet your team's individual needs. Have a control room who can monitor your teams? No problem. Is gas detection a requirement? We have that covered too.

There's been an H₂S leak…

With Blackline G7c

00m 01s
G7c sends a
high H₂S alarm
to the Blackline
Live network

00m 31s
Voice call
established with
worker who is in
obvious distress

01m 40s
Team members in
affected area receive
voice alert, mustering
them to safe areas

Worker
rescued

00m 02s
Monitoring team
receives alert showing
100ppm H₂S and
worker's location

01m 40s
Closest appropriate
team members are
directed to worker's
location to respond to
an H₂S incident

00m 00s
Worker is exposed
to 100ppm H₂S gas

**Traditional
Gas Detector**

00m 01s
Gas detector beeps
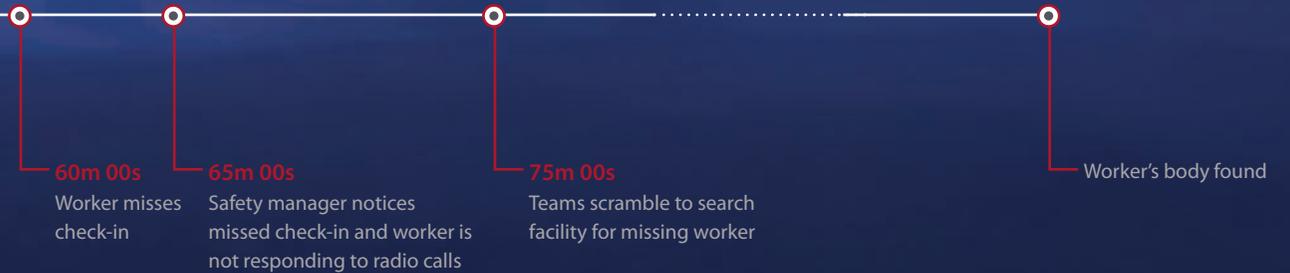and flashes, but no one
is around to hear it

Every second counts.

When an incident occurs, the clock starts and it doesn't stop until help arrives. What happens in between is in your hands.

If an employee falls from a ladder, dangerous weather is approaching, an explosion or a gas leak has occurred, G7c gives you the chance to control time. Each passing minute without action could mean a worker not going home to their family.

Need to evacuate your facility? Initiate a site-wide evacuation or just a single area in seconds. Our monitoring platform allows you to deliver a text or recorded message to targeted employees with directions on how to proceed to muster points.

Rest easy in knowing every person's location is displayed on an interactive map, complete with floor plans. Deliver your team to safety and account for every single employee. **No one is left behind.**

60m 00s
Worker misses check-in

65m 00s
Safety manager notices missed check-in and worker is not responding to radio calls

75m 00s
Teams scramble to search facility for missing worker

Worker's body found

Revolutionizing gas detection.

Traditional personal gas detectors operate like smoke alarms. They call for help with lights and sirens, in the hope that someone nearby will notice.

The biggest shortcoming of personal gas detection is connectivity. G7c meets this gap head-on with always-connected 2G/3G communications that ensure industry-leading monitoring accompanies your teams wherever they operate.

Blackline innovation integrates the value of disposable gas detectors with configurability. Choose a single or quad gas cartridge with a selection of gas sensors. When a cartridge reaches the end of its serviceable life, replace it **without taking a device out of service**, keeping your team running.

How often do you download logs from your calibration docks? Have you ever updated detector firmware with a USB software loader? G7c intelligently manages everything for you—wirelessly, over-the-air. Every event is communicated in real-time to Blackline's servers and stored for reporting. Automated accountability keeps your team safe and makes you look like a champion.

Connected safety with disposable convenience
G7c integrates real-time empowerment with the value of disposable gas detectors. When a cartridge reaches the end of its serviceable life, replace it without taking a device out of service, keeping your team running.

Meet the family.

G7c is more than just a device, it's a complete solution tailored to meet the requirements of your individual organisation. Getting started is easy by selecting your model– what functionality do you need?

Standard monitoring, single-gas detection and quad-gas detection options are available. For gas detection capabilities, select from any of our six available gas sensors to best fit your business's needs.

G7c STANDARD

- Fully connected personal safety monitor with intrinsically safe hardware

- Green SureSafe® indicator light confirms to the employee that his or her real-time safety is being monitored

- Blue LiveResponse™ light confirms help is on the way

- Two-way text messaging

- Optional two-way voice communication

- Fall, no motion and missed check-in detection

- Manual SOS latch

- Assisted-GPS location technology

- Indoor location technology

G7c SINGLE-GAS

- **Includes all features offered by G7c Standard**

- Integrated single-gas sensor with a choice of: H_2S, LEL, O_2, CO, CO_2 or NH_3

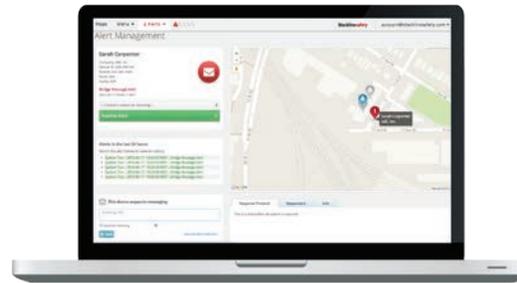- G7c gas cartridges are disposable at the end of their service life

G7c QUAD-GAS

- **Includes all features offered by G7c Standard**

- Integrated quad-gas sensor with choice of: H_2S, LEL, O_2, CO, CO_2 or NH_3

- G7c gas cartridges are disposable at the end of their service life

Meet their friends.

BLACKLINE LIVE

G7 DOCK

G7c is a complete, turn-key system that includes the web-based Blackline Live™ portal, a customizable safety monitoring system that meets each of your team's needs. From device configuration and alert preferences to employee address books and a live map, Blackline Live™ delivers industry-leading emergency response management tools.

G7c devices are also supported by the most affordable calibration and testing dock on the market—G7 Dock.

- Monitor all devices with one, easy to use web-based portal

- Quickly locate and respond to a worker in distress with our live map and alert management system

- Customise device configurations with real-time, over-the-air device updates

- G7c firmware updates are automatic, seamless and wireless

- Access control tools allow you to tailor user access according to roles– employee, supervisor, administrator and monitoring team

- Trigger and manage evacuations and mass-notifying employees by text and optional voice communications

- An affordable, simple approach to dock design

- All calibrations and bumps managed by G7c device under test

- Calibration and bump logs are communicated in real time to the Blackline Safety Network via the G7 device

- Supports G7c devices equipped with both single and quad-gas cartridges

Detailed Specifications

Standard G7c 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

G7c 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)

G7c 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)

G7c 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

H2S, LEL, CO, O2, CO2, NH3

H2S (Hydrogen Sulphide)
Sensor type: Electrochemical
Lowest detection limit: 0.5 ppm
Upper detection limit: 50 ppm
Resolution: 0.1 ppm

LEL combustible
Sensor type: MEMS pellistor
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

O2 (Oxygen)
Sensor type: Pumped electrochemical
Lowest detection limit: 0.1 %vol
Upper detection limit: 25.0 %vol
Resolution: 0.1 %vol

CO2 (Carbon Dioxide)
Sensor type: Infrared
Lowest detection limit: 50 ppm
Upper detection limit: 50000 ppm
Resolution: 50 ppm

NH3 (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
Speaker sound pressure level: ~90 dB @ 10 cm (~90 dB @3.94")
Voice calling: Speakerphone and phone modes (G7c model only)

Wireless Radio

Wireless coverage: ~200 countries
North America: 2G/3G radio, GSM 850 MHz, PCS 1900 MHz, 3G UMTS bands 2, 5 and 6
International: 2G/3G radio, E-GSM 900 MHz, DSC 1800 MHz, 3G UMTS bands 1 and 8
Antenna: Internal dual-band

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: 20 hours continuous operation at 20° C (68° F)
Charge time: 4 hours

Environmental

Storage temperature: -30℃ to 75℃ (-22°F to 167°F)
Operating temperature: -20℃ to 55℃ (-4°F to 131°F)
Charging temperature: 0℃ to 45℃ (32°F to 113°F)
Ingress Protection: IP65*

Approvals*

North America: FCC Part 15 Subpart B
Class I, Division1, Groups A, B, C and D Ex ia IIC T4 Ga
Class II, Division 1, Groups E, F and G Ex ia III T4 Da
Europe: CE, Ex ia IIC T4 GA, Ex ia III T4 Da

Warranty

G7: two years
Cartridges: Lifetime
G7 complete plan: three years

Blackline Live Web Application

Web application, hierarchical account structure meets need of any organisation, User roles (read only, alert management, supervisor and admin users), device configuration profiles, alert management profiles, employee address book, live location mapping, custom floor and site plans, reporting includes complete alert management details, device use compliance, calibrations and bump testing

All specifications subject to change
*All approvals pending

www.BlacklineSafety.com