



blacklinesafety

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 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 G7. The next best thing to time travel, it empowers your team to **respond instantly**. G7 has been meticulously designed using state-of-the-art technology for businesses to best utilize resources, minimize 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 Don't fall victim to outdated technology and inefficient methods — **gain control over the safety of your team**.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, creating the world's first disposable gas detector and the Rig Rat — the industry's first wireless gas detector. 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.

Supporting 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 revolutionize 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.

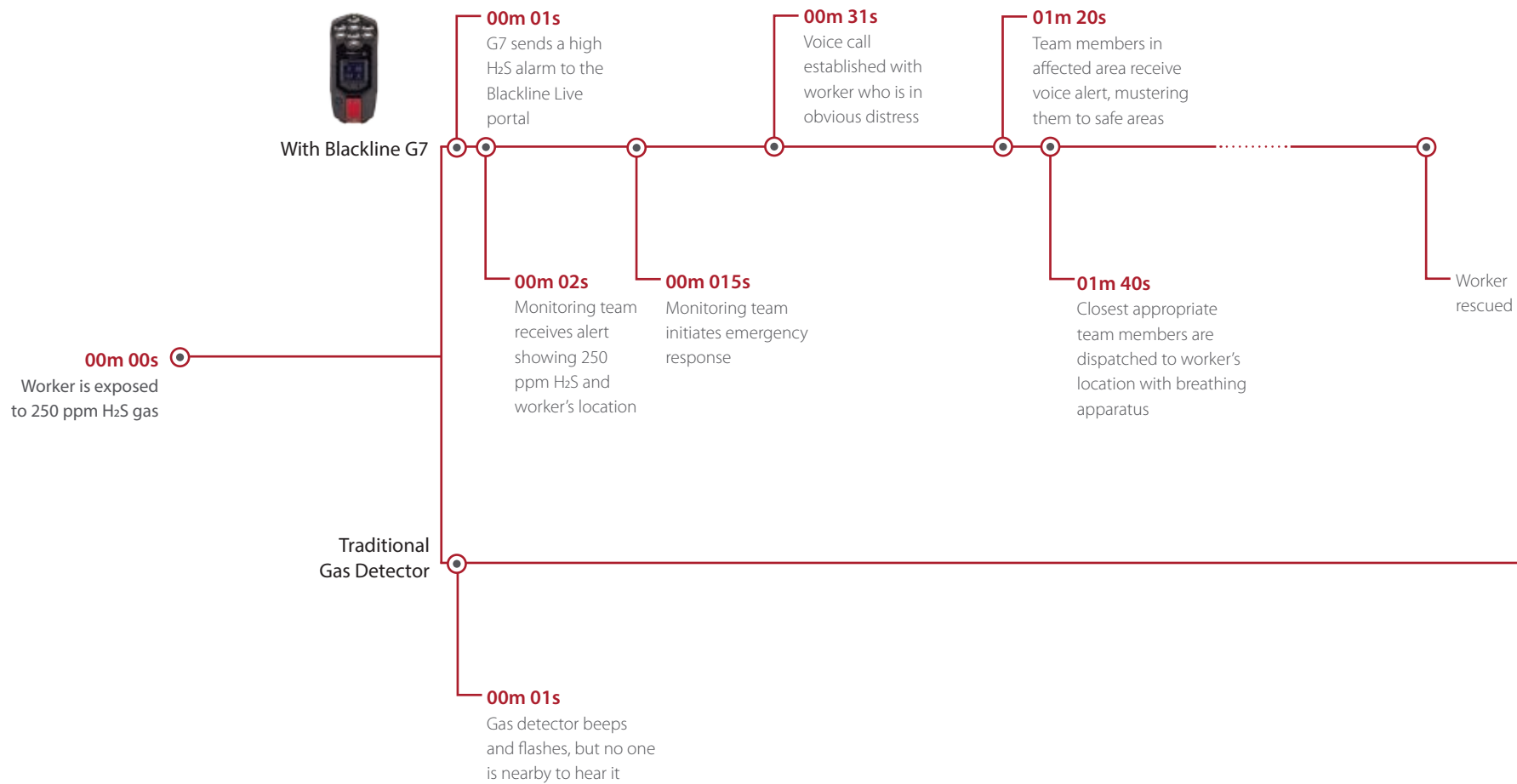
It's not just about the tens of millions we invested into safety monitoring technology or how many cups of coffee helped inspire our team. You don't have to worry about how we researched customer needs, painstakingly examined user experiences and integrated our discoveries. It's all about the difference that G7 makes for your employees, their families and your organization.



reddot design award
winner 2017

Red Dot Awards recognize outstanding product design and innovation. Selected from over 5,500 submissions, G7 defines a new level in personal safety as the first connected system of its kind with 3G connectivity, two-way speakerphone, live monitoring and an expandable modular interface. We designed G7 from the ground up to address every facet of your safety program — G7 delivers real-time situational awareness and critical safety insights in times when they're needed most.

There's been an H₂S leak...



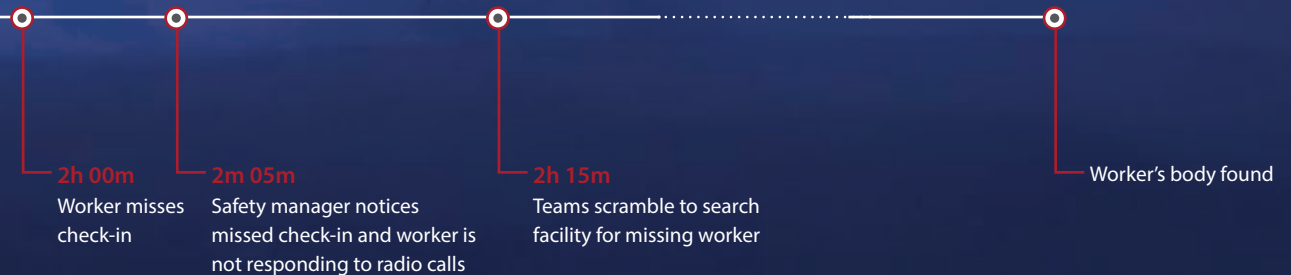
Every second counts.

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

G7 gives you the chance to control time. If an employee falls from a ladder, dangerous weather is approaching, or an explosion or a gas leak has occurred, 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 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.**



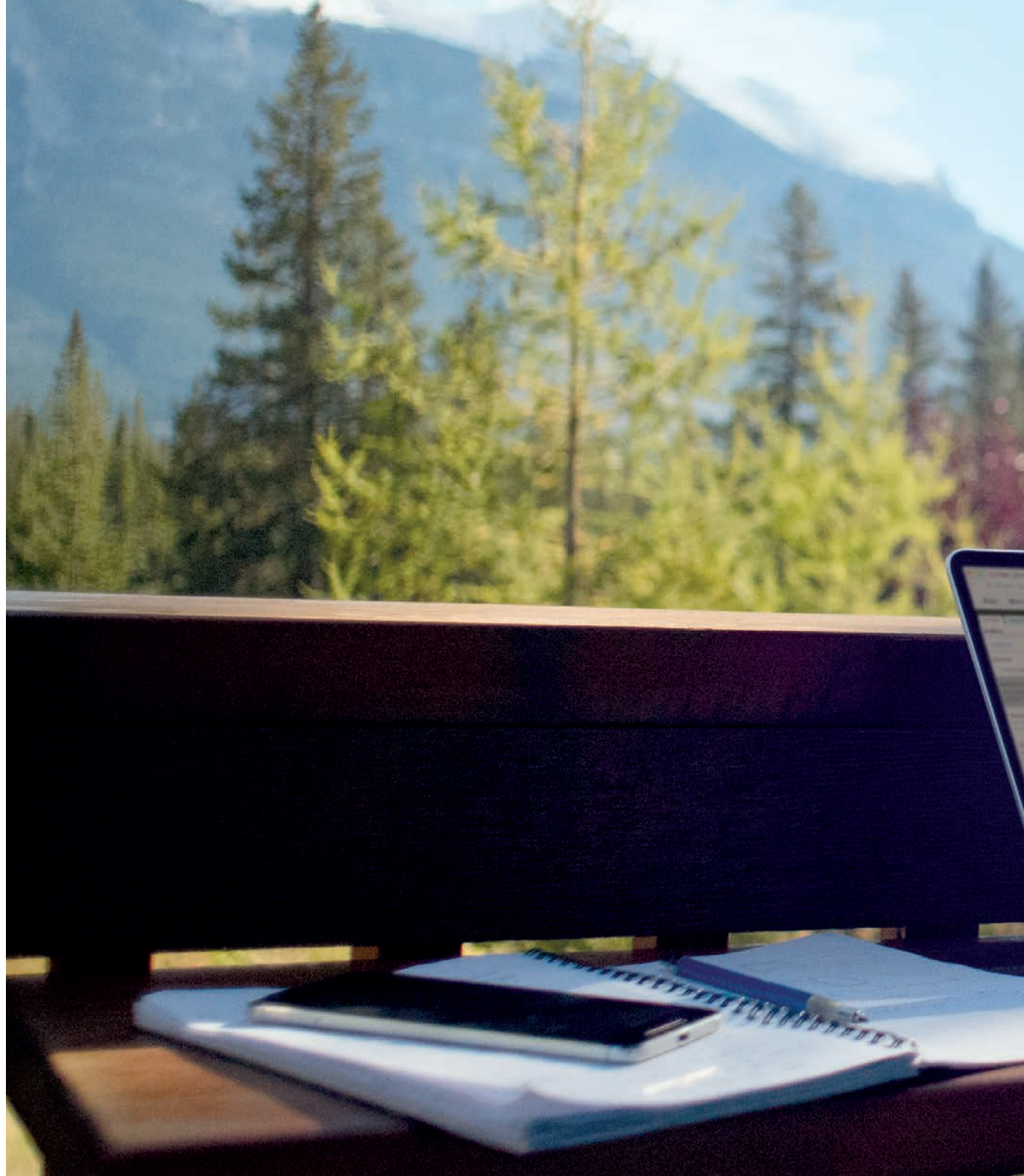
Work anywhere.

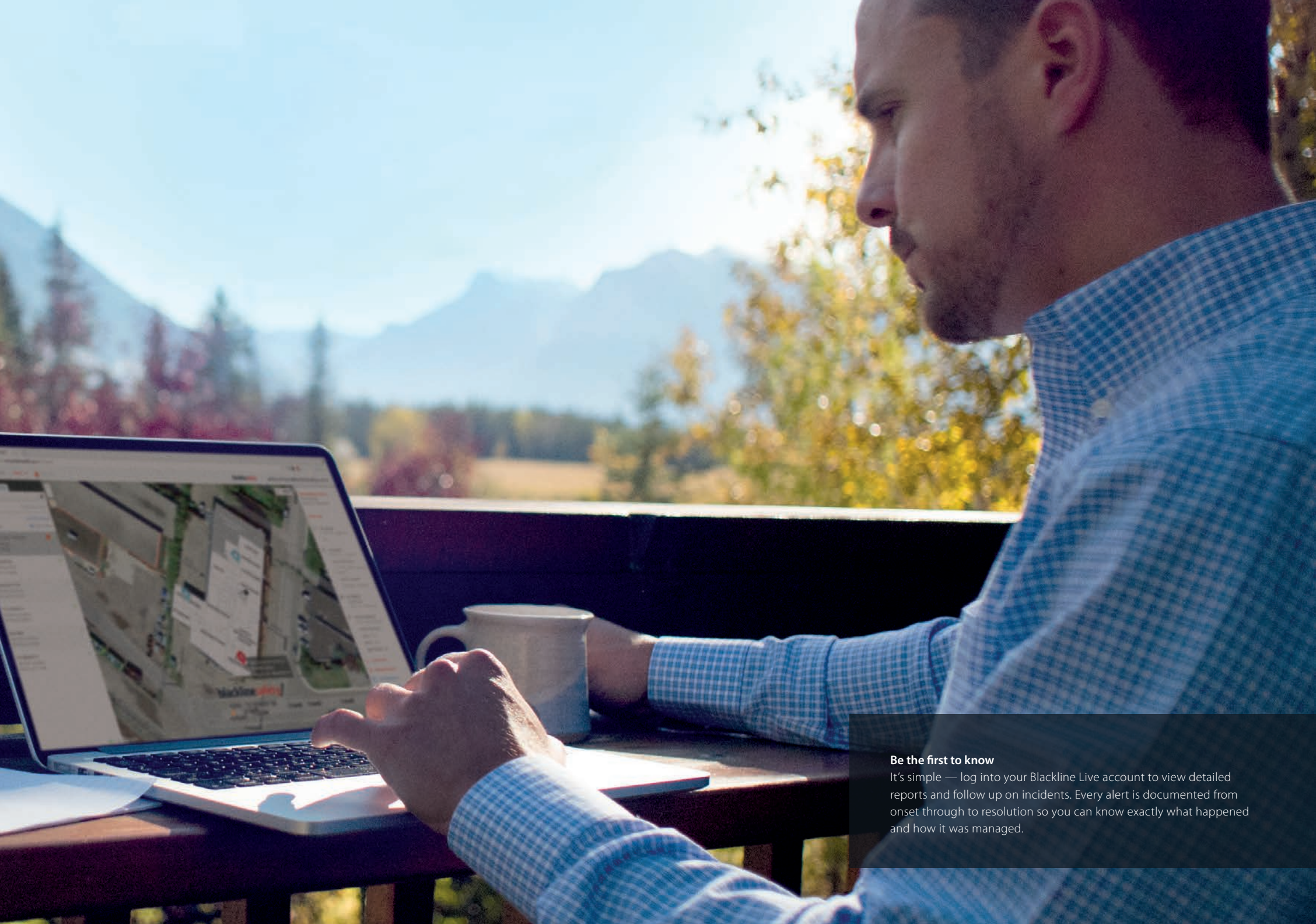
Be in control without being on-location. Accessing Blackline Live™ is as easy as logging into your online banking. G7 and our cloud-hosted safety platform fit like a glove — completely configurable for easy, infrastructure-free deployment.

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 employee-worn G7 devices. With online device configuration and automatic **over-the-air updates**, your equipment is always current with zero downtime.

With a fully customized 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 the **Blackline Safety Operation Center** to professionally manage every alert. Always be in control, even when you can't physically be there.





Be the first to know

It's simple — log into your Blackline Live account to view detailed reports and follow up on incidents. Every alert is documented from onset through to resolution so you can know exactly what happened and how it was managed.



..... Blue LiveResponse™ light shows that 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, are they safe, where is everyone and how are you going to manage the situation?

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 manually 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.

G7 is all about **trust** and ease of use. When the green SureSafe® light is on, employees know their safety is in good hands. With work-anywhere cellular and satellite connectivity, employees aren't tethered to expensive Wi-Fi networks or unreliable Bluetooth connections. G7 ensures industry-leading monitoring accompanies your workers wherever they operate, and confidently informs responders of everyone's well-being and whereabouts in real-time.



Device compliance dashboard



Device usage report



Gas detection heat map

Insights

G7 continuously streams real-time safety data to the Blackline Safety network to manage alerting, store data and facilitate reporting. An online dashboard summarizes the real-time safety status of all personnel, G7 equipment usage and gas detection compliance. Take corrective action when a device becomes out of compliance and ensure equipment is being used according to company policy and standards.

G7 reports every gas reading, helping you to map the location of persistent gas leaks and schedule proactive maintenance, before they pose a safety risk or cause unexpected downtime.

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

G7 leverages the billions of dollars already spent on cellular terrestrial networks and the Iridium satellite network.

G7 works right out of the box — turn it on and your team is instantly monitored.





Alarms don't save people. People save people.

G7 is not just another widget — 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 Blackline with our in-house 24/7 Safety Operations Center.

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, G7 **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 G7 users 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.

G7 solutions 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.





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 shortcoming of personal gas detection has been lack of connectivity. G7 meets this gap head-on with always-connected cellular and satellite communications to ensure industry-leading monitoring accompanies your teams wherever they operate.

Blackline 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**.

How often do you download logs from your calibration docks? Have you ever updated detector firmware with a USB software loader? G7 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

G7 integrates real-time empowerment with the value of disposable gas detectors. Field-replaceable cartridges and over-the-air updates ensure product up-time to keep your team running.

Meet the family.

G7^c

G7c works anywhere with cellular coverage in over 200 countries.



G7^x

G7x works with our G7 Bridge to connect you anywhere in the world using the Iridium satellite network.



G7c / G7x
STANDARD

- Fully-connected personal safety monitor with intrinsically safe hardware
- Green SureSafe indicator light informs the employee that his or her safety is being monitored in real-time
- 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 / G7x
SINGLE-GAS

- Includes all features offered by G7 Standard
- Single-gas sensor cartridge with choice of: H₂S, LEL, O₂, CO, NH₃, SO₂ or Cl₂
- G7 gas cartridges are disposable at the end of their service life



G7c / G7x
QUAD-GAS

- Includes all features offered by G7 Standard
- Quad-gas sensor cartridge with choice of: H₂S, LEL, O₂, CO, NH₃, SO₂ or Cl₂
- G7 gas cartridges are disposable at the end of their service life

Meet their friends.

G7 is a complete, turn-key system that includes the cloud-hosted Blackline Live portal, a customizable safety monitoring system that meets each of your teams' needs. From device configuration and alert preferences to employee address books and a live map, Blackline Live delivers all the tools necessary to manage a world-class safety monitoring program.

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

For G7x devices with satellite connectivity, G7 Bridge delivers an easy-to-use satellite and cellular uplink with true last-mile monitoring capability.



BLACKLINE LIVE

- Monitor all devices with one, easy to use cloud-hosted portal
- Quickly locate and respond to a worker in distress with our live map and alert management system
- Customize device configurations with real-time, over-the-air device updates
- G7 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-notify employees by text and optional voice communications (G7c)



G7 DOCK

- Affordable and simple design
- All calibrations and bumps managed using G7 device interface and intuitive menu
- Calibration and bump logs are communicated in real-time to the Blackline Safety Network via the G7 device
- Supports G7 devices equipped with both single and quad-gas cartridges
- G7 Dock server-stored configurations are automatically updated when G7 is bumped or calibrated



G7 BRIDGE

- Enables up to five G7x devices to connect through the Iridium network to the Blackline Live portal
- Facilitates two-way text messaging between G7x employee-worn device, G7 Bridge and monitoring personnel
- Compact, self powered and completely portable
- Industry-leading range of 2 km from G7 Bridge to G7x devices via 900 MHz radio link
- Radio link enables employees to confidently work indoors with reliable satellite communications
- Durable and weatherproof IP65 sealed design and heated LCD for use in cold weather

Detailed Specifications

Standard G7 Safety Alert Features

All safety alerts are transmitted in real-time 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 (30 – 180 min, or off), automatic check-in when driving

Additional Gas Cartridge Features

All gas alerts are transmitted in real-time

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

(2.52" x 4.88" x 1.06")

Weight: 162 g (5.7 oz)

G7 with Single-gas Cartridge

Size: 64 mm x 128 mm x 27 mm

(2.52" x 5.04" x 1.06")

Weight: 167 g (5.9 oz)

G7 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)

Gas Sensor Options:

H₂S, LEL, CO/CO-H, O₂, NH₃, SO₂, Cl₂

H₂S (Hydrogen Sulfide)

Sensor type: Electrochemical

Lowest detection limit: 0.5 ppm

Upper detection limit: 100 ppm

Resolution: 0.1 ppm

LEL Combustible

Sensor type: NDIR

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

Also available in CO-H (Hydrogen resistant)

O₂ (Oxygen)

Sensor type: Pumped electrochemical

Lowest detection limit: 0.1% vol

Upper detection limit: 25.0% vol

Resolution: 0.1% vol

NH₃ (Ammonia)

Sensor type: Electrochemical

Lowest detection limit: 0.5 ppm

Upper detection limit: 100.0 ppm

Resolution: 0.1 ppm

SO₂ (Sulfur Dioxide)

Sensor type: Electrochemical

Lowest detection limit: 0.5 ppm

Upper detection limit: 100 ppm

Resolution: 0.1 ppm

Cl₂ (Chlorine)

Sensor type: Electrochemical

Lowest detection limit: 0.2 ppm

Upper detection limit: 20 ppm

Resolution: 0.1 ppm

For the full range of supported gas sensors contact Blackline Safety

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)

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: Red alert communicated

Blue LiveResponse™ top and front lights: Confirmation that a monitoring team has acknowledged the alert

Personal 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: ~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 regionally optimized

G7x Wireless Radio

Works with G7 Bridge satellite base station

Radio: 902.0 – 928.0 MHz, 1 Watt

Antenna: Internal

Radio link range: 2 km (1.25 mi) real-world

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 (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°C (68°F) under normal usage

Charge time: 4 hours

Environmental

Storage temperature: -30°C to 55°C (-22°F to 167°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

Approvals*

G7c: SAR, RoHS, CE, RCM

FCC ID: XPY1CGM5NNN | IC ID: 8595A-1CGM5NNN

Canada and USA: Class I Division 1 Gr A,B,C,D T4;

Class I Zone 0 AEx ia IIC T4; Ex ia IIC T4 Ga 

IECEX: Ex ia IIC T4 Ga

ATEX: Ex ia IIC T4 Ga   II 1 G

G7x: SAR, RoHS, RCM

FCC ID: W77G7X | IC ID: 8255A-G7X

Canada and USA: Class I Division 1 Gr A,B,C,D T4;

Class I Zone 0 AEx ia IIC T4; Ex ia IIC T4 Ga 

IECEX: Ex ib IIC T4 Gb

Warranty

G7: two years limited warranty

Cartridges: lifetime with service plan

Blackline Complete: three year operating lease

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.

** Check with Blackline for approval status. All specifications subject to change.*





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www.tttenviro.com

info@tttenviro.com