

# CLOUD-CONNECTED VS ON-PREMISES

7 REASONS TO CHOOSE CLOUD-CONNECTIVITY  
FOR YOUR SAFETY SOLUTION



# TABLE OF CONTENTS

---

CONNECTED CONFIDENCE.....04

CLOUD-CONNECTED VERSUS ON-PREMISES SOLUTIONS .....05

**REASON 1**  
Improved Awareness Through Remote Visibility .....06

**REASON 2**  
Over-The-Air Updates That Save Time and Add Value .....08

**REASON 3**  
A 360-Degree View of Operations With No Data Silos .....10

**REASON 4**  
Integration of Third-Party Professional Monitoring to Optimize Responses.....12

**REASON 5**  
Enhanced Data Security, Reliability and Privacy.....14

**REASON 6**  
Improved Collaboration With Push-to-Talk.....16

**REASON 7**  
Boosted Scalability and Cost Structure .....18

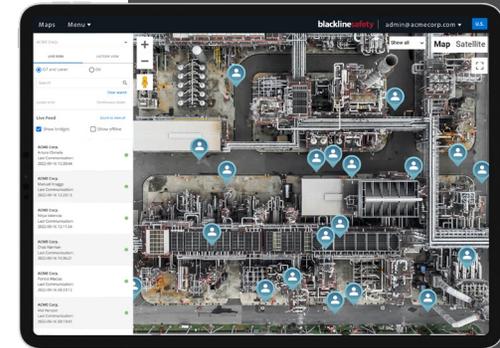
# CONNECTED CONFIDENCE

Cloud-connected safety devices—like gas detection and lone worker wearables, and area gas monitors—are becoming standard as workplaces transform digitally. They can link employees for live awareness, enable real-time information sharing, collect vital location data, support more informed decision-making, and facilitate faster emergency responses. Advances in automation like data visualizations, compliance reporting and analytics also mean less time gathering information and more time acting on it to improve.

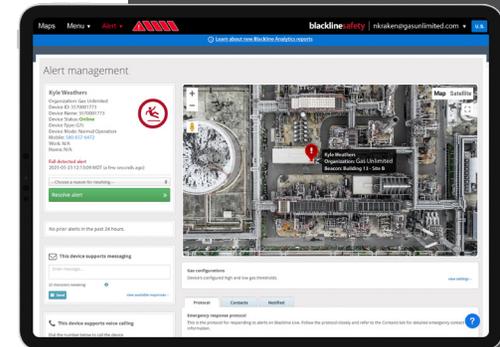
## Wondering if a cloud-based safety solution is right for you?

There's a lot to think about: from data security and privacy, to reporting to emergency response. This guide explores **seven key reasons** cloud-connected solutions are a game-changer for industrial workplaces—supporting greater collaboration, boosted reliability, easier fleet management, and much more.

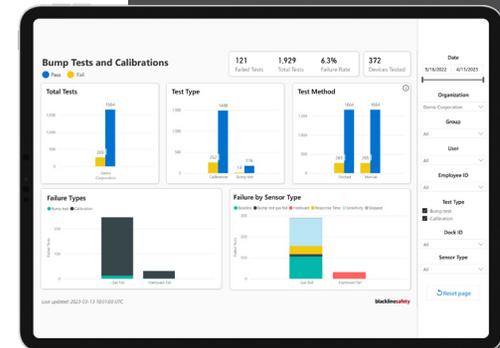
Read on to discover why a connected solution is a smarter, future-proof choice that trumps traditional on-premises solutions.



Real-time Monitoring



24/7 Response



Analytics Reporting

# CLOUD-CONNECTED VERSUS ON-PREMISES SOLUTIONS

---



Cloud-connected solutions are ones where:

- Safety devices are linked to remote servers supported by a third-party cloud service provider.
- Data from device usage is streamed in real-time.
- Users can access the solution via the internet from any computer, tablet or smartphone.



On-premises (or “non-cloud” based solutions) are ones where:

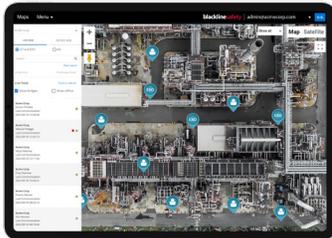
- Safety devices (gas detectors) are wirelessly connected to a local server on site or a server-attached docking station.
- Data is manually uploaded.
- Access is limited to users within the organization’s physical premises or through records sent via email.

# IMPROVED AWARENESS THROUGH REMOTE VISIBILITY

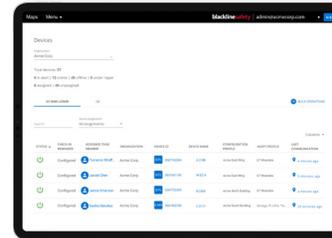


Devices with built-in direct-to-cloud connectivity via cellular or satellite enable you to monitor multiple facilities and protect workers—whether they are across town or around the world—from a centralized software dashboard accessed from anywhere with an internet connection.

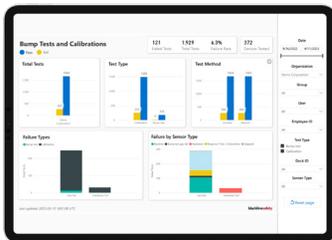
Through the dashboard you can:



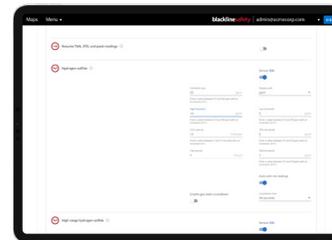
View device locations on a map to see in real-time where your people are.



Check online or offline status to understand usage.

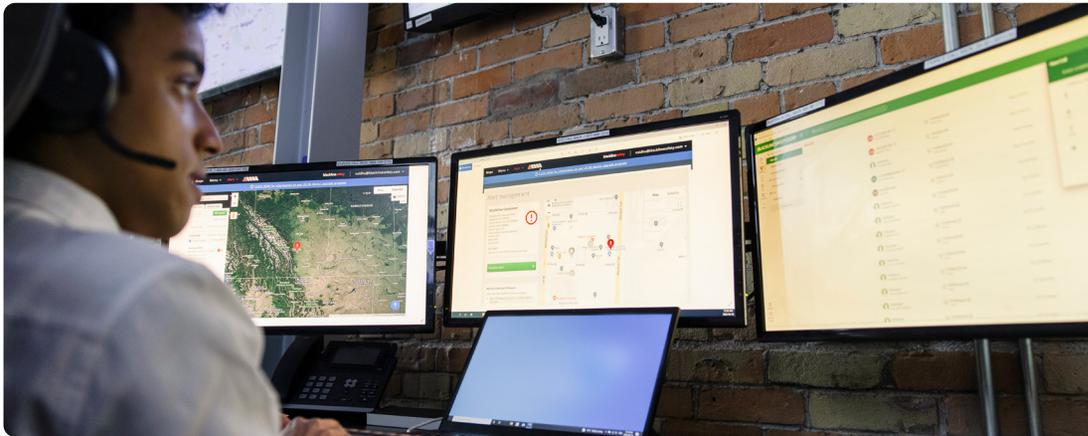


Understand bump test, calibration and firmware update history to manage compliance.



Change device behavior on the fly, like modifying the high/low gas thresholds of a sensor.

**...and more.**



You'll also have confidence that if there is an emergency where a worker needs help, all the information required to dispatch help—location, nature of incident, gas exposure levels if applicable, even wind direction—is available anytime, anywhere.

This level of situational awareness, usage status and ease of configurability is not possible with traditional on-premises solutions, where devices need to be physically docked to retrieve data or make changes to a device, delaying an effective response.

Built-in direct-to-cloud connectivity does not require infrastructure on premises (like expensive Wi-Fi installations) or device extensions (cellular pack, gateways or Bluetooth) to take information from the device and deliver it to the cloud – it's done automatically. A lower number of devices relaying information vastly reduces the cost and complexity in achieving remote visibility.

“With Blackline Safety’s connected gas detection tools supporting our hazmat team, I was confident we all had the critical information we needed to make decisions and target our response. I was able to monitor the entire situation as it happened remotely from my cell phone.”

*Fire Chief of Major American City*

Read the full story [here](#)

## OVER-THE-AIR UPDATES THAT SAVE TIME AND ADD VALUE



Cloud-connected devices enable automatic over-the-air (OTA) configuration changes and firmware updates, saving you time and money. That's because they eliminate the need for manual upkeep while also giving you the ability to easily scale up to add value.

No matter where you are, you can access your cloud-based solution via the web and make necessary changes and upgrades to your fleet. You get the flexibility and control to tailor your connected devices to the situation or worker needs by:



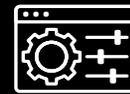
Remotely updating device firmware to get the latest features



Unlocking new features or capabilities with online toggles



Changing device assignment



Modifying configurations at once in response to worker needs in the field as they arise



Applying alert response protocols globally





On-premises solutions, by contrast, require on-site configuration changes—usually by a trained technician—which can be time-consuming and impractical for large fleets. Plus, if connected devices require an urgent security upgrade, OTA updates and global fleet visibility enable you to execute mission-critical updates much faster than on-premises solutions which require device docking and manual hardware and software updates.

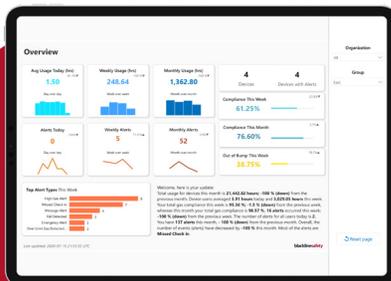


A recent study by the Massachusetts Institute of Technology (MIT) found that transitioning to the cloud pays off, helping firms improve productivity, increase revenue, and build a foundation for initiatives such as artificial intelligence and supporting a remote workforce **(MIT Sloan, 2022)**.

## A 360-DEGREE VIEW OF OPERATIONS WITH NO DATA SILOS

With on-premises solutions it can be hard to get a full picture of all your operations as devices often require docking to get information from the previous day. Conducting efficient and effective incident investigations or trends analysis is a further challenge as data from different devices needs to be downloaded and then merged manually into a report.

Cloud-based solutions, conversely, can seamlessly aggregate data from all your devices and facilities into unified reports, providing an easy-to-access company-wide perspective with options to drill down into site or group-specific data. You can more easily measure how you are performing against company, site, team or individual group goals.



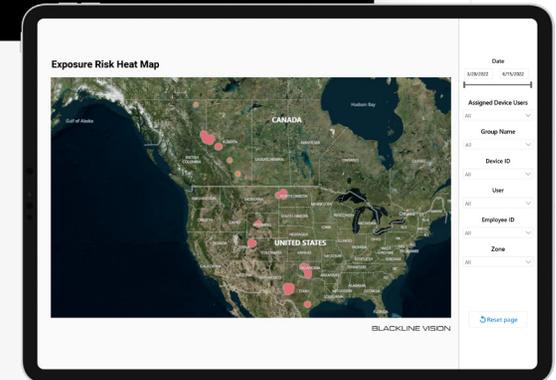
You also get much faster access to information in a single pane view, putting all the information you need for informed decision-making at your fingertips. This is especially important during incident investigations where a fast response to get in front of hazards is critical. Zero in more easily on data-informed actions to improve site and worker safety, enhance efficiency and measure the effectiveness of any introduced changes along the way.

In a survey of 750 organizations, **93%** reported having most of their workload in the cloud (**RightScale State of the Cloud Report, 2020**)

# REAL-LIFE CASE STUDY

## Identifying high-risk sites to put proactive safety measures in place

- An upstream oil & gas company, operating in both the U.S. and Canada and employing thousands of people, oversaw several worksites and offices across both countries.
- Due to its cross-border, multi-site and multi-application operations, detecting gas levels and ensuring the safety of lone workers was a considerable challenge. The company's HSE team solely relied on workers reporting every safety incident, which in many cases failed to happen due to the fear of retribution or disinterest in filling out paperwork.
- The company deployed Blackline Safety's connected safety wearables, which provided them with significant data on worker movements, gas exposure and more, across every site and office.
- As a small HSE team with limited time and resources, the company sought out Blackline Safety's data services experts to analyze the device data and prioritize the biggest threats to its worksites and the riskiest behavior.
- The real-time nature of data coming from the G7 wearables ensured they had constant visibility into risk trends across all their sites.
- Long-term analysis of risk patterns allowed them to proactively measure and mitigate risky behaviour with improved training, signage and information.



## INTEGRATION OF THIRD-PARTY PROFESSIONAL MONITORING TO OPTIMIZE RESPONSES



Cloud-based solutions give you the flexibility to manage emergencies from a control room on site or remotely. This means your call centre in Houston, for example, can respond to an emergency in Australia.

This flexibility is not possible with on-premises solutions which require on-site security personnel or on-site 24/7 monitoring staff to support any alerts in the field. Organizations with on-premises safety solutions are closing themselves off to the possibility of being able to add high value services like offsite monitoring without significant spending and churn.

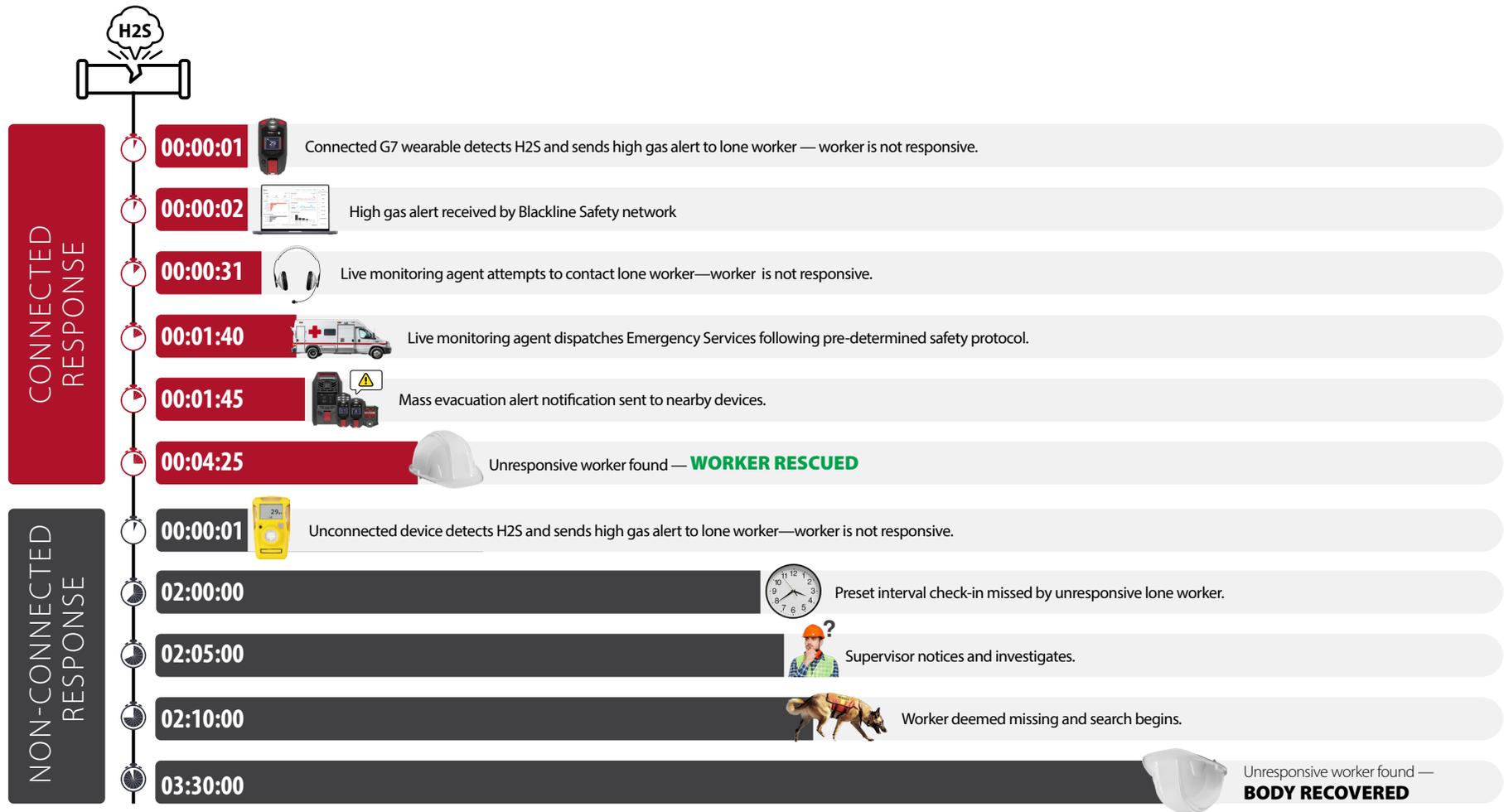
Cloud-based solutions also mean that third parties, like Blackline Safety, can offer professional 24/7 live monitoring services, freeing up internal resources for other activities.

### 24/7 Live Monitoring With Blackline Safety



Blackline Safety offers real-time monitoring through its five-diamond certified Safety Operations Center or global Alarm Receiving Centers. Professionally trained agents are prepared to handle any situation—from lone worker hazards to gas leaks to full-scale evacuations—with

alerts received in two seconds and responded to within a minute. Each one is managed from receipt through to resolution, adhering to each customer's unique emergency response protocol, and agents can quickly escalate to involve local emergency services as needed.



## When an incident occurs, every second counts

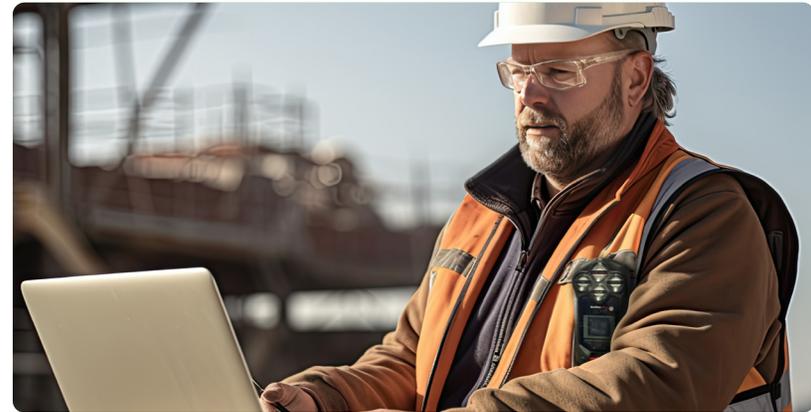
Connected technology can shave the response time dramatically leading to a response being initiated within seconds and a worker being rescued within minutes. Conversely, it could take up to three and half hours to reach an unconnected worker, and by then it can be too late.

## ENHANCED DATA SECURITY, RELIABILITY AND PRIVACY

Data security and reliability are critical in safety systems—they simply cannot fail.

With on-premises solutions, security is primarily managed by an organization's IT team, meaning they bear the full responsibility for implementing updates and patches promptly and ensuring disaster mitigation protocols are in place.

And while they can create an air gap for data (meaning you could disconnect your system from the internet as the most extreme way of protecting data), they still require businesses to manage secure access, both physically and digitally. That means they're required to handle power, server cooling, computer hardware, operating systems, networking, and ongoing IT support—all of which is taxing on internal resources.



**70%** of data breaches struck on-premises environments compared to **24%** in the cloud (**Verizon 2020 Data Breach Investigations Report**)

Blackline Safety is a certified AWS Public Sector Partner, a validation that confirms Blackline's software meets AWS technical standards for data security and shows a shared commitment to deliver secure and reliable solutions.



For cloud connected solutions, such as Blackline Safety's, customer data is hosted by the cloud service provider—in our case, the industry-leading Amazon Web Services (AWS)—that ensures all data is encrypted, securely housed, and backed up. In fact, over 30% of all cloud computing in the world is hosted on AWS (Statista, 2022). Web servers and databases are managed across multiple availability zones which further boost reliability and security.

Key benefits of data security in the cloud include:

	Complex data encryption.		Round the clock staffing.
	Network segmentation removes risk of phishing and email threats.		High reliability through multiple data centers.
	State of the art physical security at data centers.		Compliance with industry standards.
	Regular security updates with OTA patches.		

The security features offered by cloud providers such as AWS would almost be impossible to match on site and require significant investment. When using cloud-based safety solution providers such as Blackline, these benefits are passed down to customers as part of the service offering.

### Safeguarding Customer Privacy

Blackline Safety's cloud-based platform Blackline Live is General Data Protection Regulation (GDPR) compliant, with separate European and North American domains to process and store your data in the country of origin. Additionally, accounts are firewalled to ensure other users of Blackline Live cannot access, view or manipulate other users' data for an added privacy safeguard.

## IMPROVED COLLABORATION WITH PUSH-TO-TALK

Cloud-connectivity powers innovative capabilities like Blackline Safety's industry-leading Push-to-Talk (PTT) technology. With PTT, safety devices can be used like walkie-talkies delivering voice communication across a global network and breaking down physical boundaries.



This feature means team members can engage in radio conversations with colleagues, whether they are on the same site, down the street, in the truck, or across the globe. The number of wearables on a worker down is also reduced from two to one (if using gas detector and a radio) or three to one (if using gas detector, radio, and a man down device).



This unrestricted communication capability enhances efficiency and collaboration by adding an easy-to-use communication feature within organizations for a fraction of the cost of equipping everyone with a radio. Workers also feel more comfortable and safer when performing dangerous tasks knowing their cloud-connected devices can link them to their peers (via PTT) or at once to monitoring personnel for help if needed.

On-premises solutions are unable to offer two-way calling and messaging across a global network.



“There are two things that our field employees really like about this device, based on the feedback that we have received...One is the SOS latch. So, easily they can pull it anytime they are in danger and there is help coming. That’s one and the second is the two-way pager. So, they can talk to each other, ‘I’m in the middle of doing work.’ I talk to somebody else and I say, ‘Hey, this is the help I need,’ or ‘How should I do this?’ Those are the two things that they like the most.”

*Director of Safety Technology, Global Utilities Company*



## BOOSTED SCALABILITY AND COST STRUCTURE

Initial costs for on-premises solutions are higher due to the need to buy IT infrastructure, hardware and software licenses upfront. Scaling to meet rising demand may mean more purchases, which can be time-consuming and costly. For example, buying and installing more servers, software, and upgrade components could take weeks or months, creating missed opportunities and delays.

Maintenance and updates also require regular monitoring and management by the organization's IT team. Hiring more personnel and/or contracting to a third party may be needed, increasing operational costs.

Cloud-based platforms do not require any upfront investments and support unlimited scalability, allowing organizations to easily adjust resources based on needs. This is especially beneficial for large-scale events like a turnaround or shutdown that brings an influx of new workers, or during times of rapid decrease in the workforce like during the COVID-19 pandemic. Maintenance and updates are managed by the cloud service provider, reducing the burden on the organization's IT team.

Cloud solutions also follow a subscription-based model, where customers pay only for the services they use on a recurring basis. These can be scaled up and down as needed to optimize cost of ownership.



### ON-PREMISES

- Requires physical space and environmental controls.
- Maintenance or updates managed in-house or contracted out.
- Physical space and additional infrastructure investment constrains scalability.
- Risk of data loss or service disruption through physical damage or environmental factors.
- Need for in-house backup system and disaster recovery solutions.



### CLOUD-CONNECTED

- Minimal upfront investment.
- Service provider handles maintenance, updates and security patches.
- Additional personnel and contracts are limited or not required.
- Pay-as-you-go pricing models.
- Easy scalability based on demand.
- Access from anywhere with an internet connection.
- Built-in redundancy and backup solutions.



When it comes to protecting your people, saving lives, and making the best use of your resources, it's clear that cloud-connected solutions trump on-premises ones.

To recap, that's because, they deliver:

1. Improved visibility through remote awareness.
2. OTA updates that save time and add value.
3. A 360-degree view of operations that eliminates data silos.
4. Integration of third-party professional monitoring to optimize responses.
5. Enhanced data security, reliability and privacy.
6. Improved collaboration with PTT.
7. Boosted scalability and cost structure.

### Don't Just Take Our Word for It!

According to the National Safety Council in a recent report, connected safety wearables are a key strategy for protecting workers, especially lone workers.

**Read the research highlights.**

## READY TO LEARN MORE? **LET'S CONNECT.**

---

### **NORTH AMERICA** (TOLL FREE)

1 877 486 8889 | [sales@blacklinesafety.com](mailto:sales@blacklinesafety.com)

### **EUROPE**

+44 1787 222684 | [eusales@blacklinesafety.com](mailto:eusales@blacklinesafety.com)

### **INTERNATIONAL**

+1 403 451 0327 | [sales@blacklinesafety.com](mailto:sales@blacklinesafety.com)

**blacklinesafety**