INTRINSICALLY SAFE

Lōner 900

Features

Intrinsically safe

Fall detection

No-motion detection

TeamAlert

SOS Alert

Check-in

GPS location

Indoor location compatible

MONITOR EMPLOYEE SAFETY ANYWHERE

Person-worn component of the Loner System

Until now, there has been no true safety monitoring solution for employees working in remote locations. Blackline Safety's Loner System is the first comprehensive solution, and consists of two parts—the portable G7 Bridge base station and the Loner® 900 employee-worn safety monitoring device.

Certified intrinsically safe, Loner 900 continuously monitors an employee's safety, in real-time. Its SureSafe™ monitoring light provides confidence for the user that his or her safety is being monitored continuously. When an incident occurs, Loner 900 instantly communicates a safety alert and the worker's precise location to monitoring personnel, empowering an efficient and precise emergency response.

Loner 900 was designed from the ground up to operate as well indoors as it does outside. A robust, industrial-grade radio link maintains a connection with G7 Bridge that provides freedom to employees to operate up to 2 km away in real-world conditions — even further when line of sight permits. Loner 900 is compatible with Blackline's Loner Beacon indoor positioning technology, providing precise positioning when GPS is unavailable or imprecise.

A combination of automatic and manual safety monitoring features — including fall detection, no-motion detection, periodic check-in, emergency latch and silent emergency button — keep employees connected to monitoring personnel.

Loner 900 was designed to support team operations — its TeamAlert® feature notifies co-workers instantly of a safety incident for a rapid local response. All safety alerts communicated to monitoring personnel include the geographic location of the worker in distress, for immediate and efficient emergency response. Monitoring options include email, SMS, and web portal. The Loner system can be self-monitored or externally monitored via Alarm Receiving Center (ARC), or both.

The Loner System is comprised of G7 Bridge and Loner 900

Alert Messages
Fall detected, emergency latch, silent emergency no-motion, missed check-in, TeamAlert, low battery, log-on, power off

Mobile Messaging Methods
Email, text message (SMS)

Power & Battery
Rechargeable Li-ion battery: 1250 mAh Li-ion
Battery Life: 20 hours continuous operation at 20° C (68° F)
Charging connector: 4-pin sealed connection

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: Designed to meet IP65

Regulatory Compliance
SAR, RoHS
FCC ID: W77LNR900, IC: 8255A-LNR900
Intrinsically safe: Class I, Div. 1, Groups A, B, C, D and Class II, Div. 1, Groups E, F, G, T4, Class I Zone 0, Group IIC, T4

Device Requirements
Activation within Loner Portal, service plan, GPS/ Loner Beacon coverage for locating, real-time 900 MHz radio link to G7 Bridge, satellite or cellular communications

Warranty
One-year limited factory warranty

Wireless coverage and service plans
900 MHz operation: ITU Region 2
Service plan options: Contact Blackline Safety

Blackline Live Web Application
Features include: Alarm banner, event history, device location mapping, device management, alert & notification settings, and more.
Comprehensive safety alert life cycle management: includes alert configuration profiles, safety protocol, and emergency contacts

DETAILED SPECIFICATION

Size & Weight
Size: 63 mm x 107 mm x 22 mm (2.48" x 4.21" x 1.02")
Weight: 137 g (4.8 oz)

Safety Monitoring Features
Fall detection technology: Tri-axis accelerometer, tri-axis gyro, software processing
Emergency latch: Pull latch to trigger alert
Silent emergency: Press & hold check-in button to trigger alert
No-motion detection: Configurable time window (1–30 min, or off)
Worker check-in: Configurable check-in period (5 – 180 min)

Buttons & Indicator Lights
Power button: Power on/off
Check-in button: Check-in/Silent Emergency/cancel pending alerts/acknowledge alerts
Emergency latch: Send emergency alert
Red indicator light array plus vibration and beeper: Safety alert triggered
Green SureSafe light: Blinking (powered), continuous (connected)
Yellow indicator light: TeamAlert™ — return to G7 Bridge to coordinate local emergency response
Blue indicator light: Alert has been acknowledged in the portal

User Notification
Indicators: Acoustic buzzer, LEDs, and vibration motor
Acoustic beeper sound pressure level: ~90 dB @ 10 cm (~90 dB @3.94")

Wireless Communication
900 MHz Radio: 902.0–928.0 MHz, 1 Watt
Antenna: Internal
Communication: real-time, bidirectional

Location Technology
GPS Radio: 48-channel high sensitivity, mobile assisted
GPS Antenna: Internal Ultimate Sense GPS antenna
GPS Accuracy: ~5 m (16 ft) outdoors, ~50 m (165 ft) indoors
Indoor positioning radio: 2.4 GHz, Loner Beacon compatible
Loner Beacon resolution: ~5 m (16 ft) indoors/ outdoors
Real-time location turnaround time: ~20 seconds

900 MHz Radio Link Range
General use: up to 2 km
Hilltop to hilltop: 10+ km, terrain, foliage, and buildings will affect overall 900 MHz radio link range

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