User Guide

Loner

M6

Mobile Worker Safety Device

blacklinesafety

Alert. Locate. Respond.
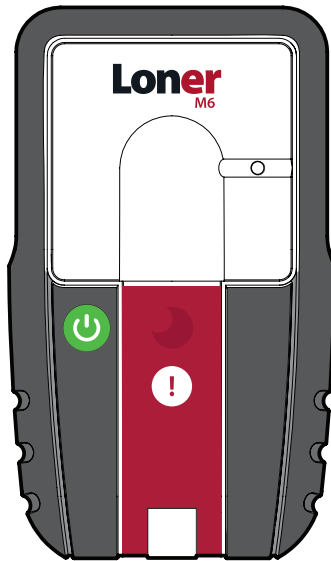
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Warranty

Your Loner device is warranted against defects in materials and workmanship for up to one year from date of purchase. For further details regarding your Blackline warranty, please refer to your Terms and Conditions of Service.

More information and support visit: http://www.blacklinesafety.com

CE FCC Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for further assistance.

Industry Canada Compliance

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Notification d'Industrie Canada

Ce dispositif est conforme au(x) format(s) RSS libre(s) d'Industrie Canada. Son fonctionnement est assujetti aux deux conditions suivantes : (1) Cet appareil ne peut causer d'interférences nuisibles, et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant provoquer un mauvais fonctionnement du dispositif.

RF Exposure Statement

For body worn operation, Loner 900 has been tested and meets the FCC and IC guidelines for RF exposure when used with the Blackline Safety belt clip designated for Loner 900. Use with other accessories may not ensure compliance with FCC and IC guidelines for RF exposure.

Déclaration d'exposition RF

Pour utilisation sur le corps, Loner 900 a été testé et répond aux directives de la FCC et IC d'exposition aux radiofréquences lorsqu'il est utilisé avec le clip ceinture Blackline Safety désigné pour Loner 900. Utilisation avec d'autres accessoires peut ne pas assurer le respect des directives de la FCC et IC d'exposition aux radiofréquences.

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Safety Precautions

Blackline takes your safety and the safety of those around you very seriously. It is important for you to be aware of the following precautions.

⚠ DANGER

Do not place a Blackline Safety product in or near an open flame or in the presence of flammable gases or fumes.

Turn Loner off when you are near petrol stations, fuel depots, chemical plants, or where blasting operations are in progress. Operation of any electrical equipment in potentially explosive atmospheres can constitute a safety hazard.

⚠ WARNING

When in a hospital or other health care facility, observe the restrictions on the use of mobile devices, such as cellular phones. Do not operate Blackline Safety products where you are not able to operate your mobile/cellular phone.

Switch Blackline Safety products off before boarding an aircraft and make sure that it cannot be inadvertently turned on. To prevent interference with communication systems the operation of wireless applications, including Blackline Safety products, is forbidden aboard aircraft. Failure to observe these instructions may lead to the suspension or denial of cellular services to the offender, legal action, or both.

Road safety comes first. Do not operate a Blackline Safety product while you are driving a vehicle. Park your vehicle before operating a Blackline Safety product, or using your mobile phone to interface to the Blackline Safety service.

Electrical equipment may be hazardous if misused. Operation of this product, or similar products, must always be supervised by an adult. Do not allow children access to the interior of any electrical product and do not permit them to handle any cables.

Loner M6 meets the regulatory requirements for RF exposure provided that the following separation distances are maintained.

Scenario	Requirement
Between head and Loner M6	Keep Loner M6 10 mm away from your head
Between body and Loner M6	Loner M6 may be used anywhere against your body (0 mm separation)

Do Not operate Blackline products outside their specified operating temperature. Consult the specifications section.

Do Not store Blackline products outside their specified storage temperature. Consult the specifications section.

Do Not operate Blackline products outside their specified humidity rating.

Do Not operate Blackline products in direct sunlight.

Do Not dispose of Blackline products in your household trash. Seek advice from your local electronics recycling authority. Blackline products may contain an internal lithium-ion battery pack.

Getting Started

Activate your Device

Activation of Loner® M6 device is managed within your Loner® Portal account by the Blackline Customer Care team. If a Loner Portal account has not been created, our Blackline Customer Care team can provide assistance.

North America toll-free: **1-877-869-7212**
Americas telephone: **+1 403 451 0327**
Americas email: **support@blacklinesafety.com**
Europe and international telephone: **+44 1787 222684**
Europe and international email: **eusupport@blacklinesafety.com**

Web: **www.blacklinesafety.com**

Overview

The Blackline Safety Loner M6 dedicated safety device provides multi-layered safety for you as a mobile worker. This guide provides information that you will find helpful to comfortably operate your Loner M6 device. Loner M6 contains the following internal components:

- Wireless radio and antenna

- High sensitivity assisted GPS receiver

- Large capacity 1200 mAh rechargeable battery

- Tri-axis accelerometers

- Tri-axis gyroscope

- Voice call functionality

- Vibration motor

- Emergency latch

- Power button and indicator light

- Indicator light array

- Alarm speaker

- USB interface for charging

- Integrated weather-proof and dust-proof case

Requirements

Loner M6 monitors your safety when:

- It has been activated in a Loner Portal user account
- It has sufficient battery capacity to operate
- It has sufficient wireless signal level to communicate data
- It has sufficient GPS signal coverage to compute locations
- You are wearing the device

Contents

- Loner M6 with metal clothing clip (removable)
- Micro USB charging clip
- Charging cable
- Wall charger
- Plastic belt clip and screw
- Loner M6 user guide

Loner M6 Service Plan
Various service plan options are available depending on your feature level requirements. Contact Blackline for more information.

Using Loner M6

Ensuring Protection with Loner M6

When safety monitoring is required, perform the following to ensure you are being protected with Loner M6.

1. Press the power button to turn on Loner M6.
   The Power Button Indicator Light on Loner M6 will blink while establishing a network connection. The vibration motor vibrates and the beeper annunciates the power on sequence. Loner M6 will continue to flash the Power Button Indicator Light while it is establishing a network connection.

2. Wait for Loner M6 to establish a network connection. The Power Button Indicator Light remains on continuously.

3. Wear Loner M6 on your belt at your hip at all times that you require remote safety monitoring. Perform your work duties as you normally would. Loner M6 automates remote monitoring of your safety.

4. Power down Loner M6 when remote monitoring of your safety is no longer required.

❖ The Loner M6 logo must face outward, away from your body for optimum GPS and fall detection performance.
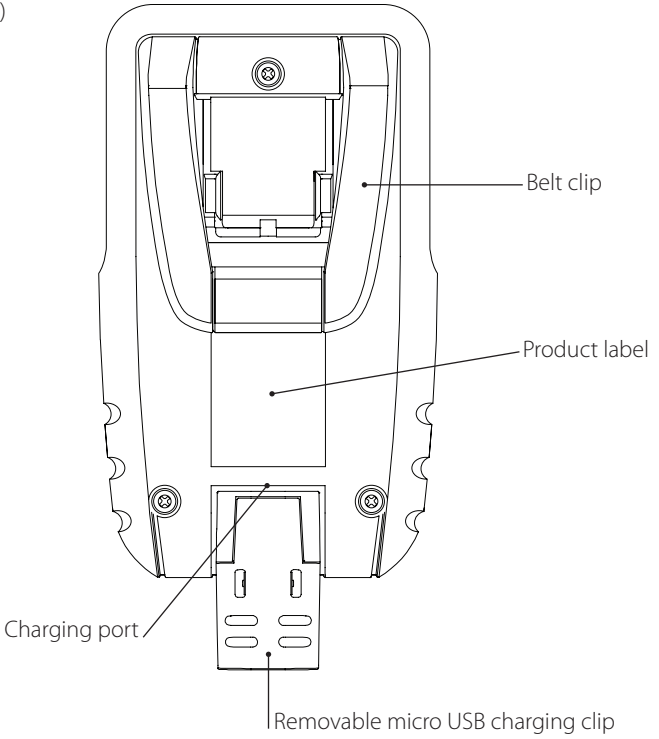
Loner M6 Hardware Details

Loner M6 is rugged and purpose-built for monitoring your safety. Physical details are outlined below.

Physical Feature	Use
Power Button & SureSafe™ Indicator Light	Powers Loner M6 and indicates monitoring status to the Blackline Safety Network
Check-in Button	Used to check-in and silence the device during an automatic alert
Indicator Light Array	Indicates Loner M6 is in an Alarm state
Confirmation LED	Indicates that an alert generated from the Loner M6i is being remotely managed by monitoring personnel (blue)
Emergency Latch	Sends an emergency alert to monitoring personnel
Charging Light	Indicates the charging state
Product Label	Provides device information, unit ID and activation code
Metal Belt Clip	Attaches Loner M6 to a belt
Charging Port	Charges Loner M6
Removable Micro USB Charging Clip	Adapts Micro USB cable to charging port for charging Loner M6
Microphone	Allows you to speak to monitoring personnel
Speaker	Enables audible sound to be received

VoiceCall capability requires a voice plan
Various service plan options are available depending on your feature level requirements. Contact Blackline for more information.

Indicator light array
(red)

Confirmation LED
(blue)

Muster Alarm LED
(yellow)

SureSafe
indicator light and
power button
(green)

Microphone

Charging light
(red, on bottom)

Speaker

Confirm button (push)

Emergency latch (pull)

Belt clip

Product label

Charging port

Removable micro USB charging clip
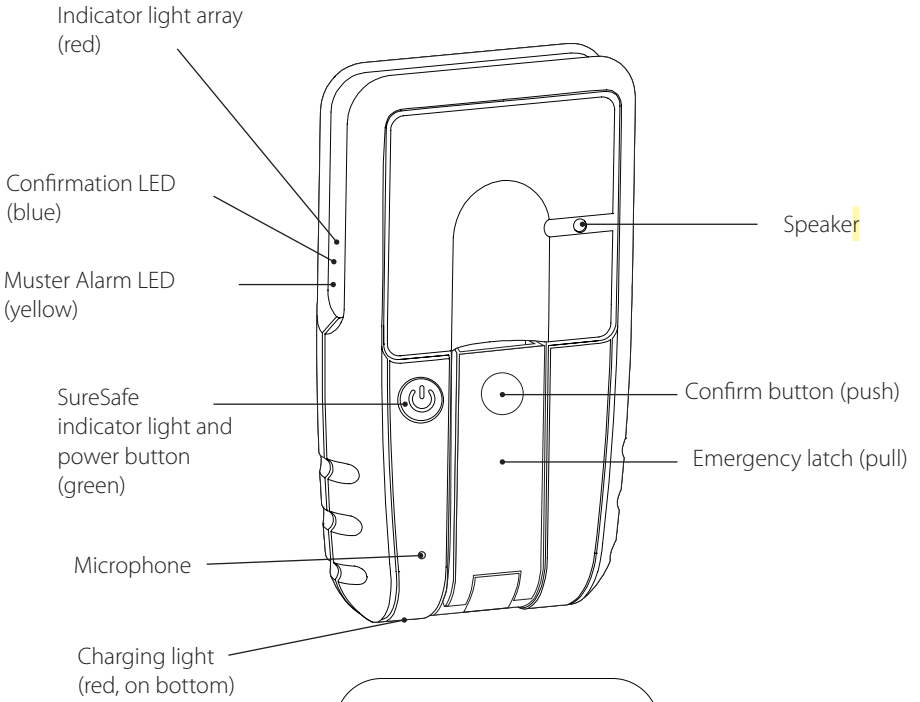
Charging Loner M6

1. Plug the wall charger into an electrical outlet.

2. Insert the micro USB Cable Plug ⟷ into the corresponding micro USB charging jack on the charging clip and insert the other USB plug into wall charger.

3. Slide the charging clip onto Loner M6 using the guides to align the clip with the charging port on the device.

4. Completely charge Loner M6 for six hours.

5. Remove the charging clip from Loner M6.

❖ Charging Loner M6 turns the device Off ensuring it will not trigger alerts while charging.

❖ Blackline recommends charging Loner M6 after each shift to ensure the device is fully charged for the next shift.
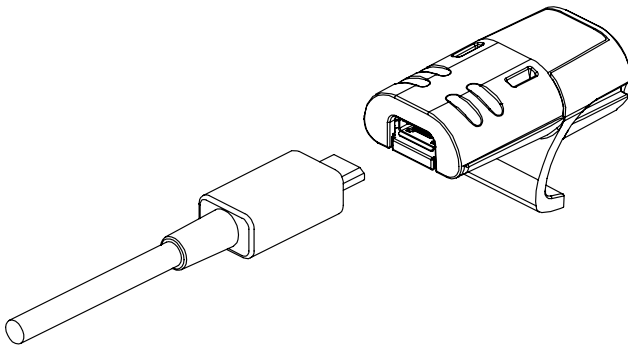
Charging Status

While charging, you can determine the charging progress by observing the charging light located at the base of the device.

Red Charging Light Behaviour	Description
Light flashing	Indicates Loner M6 is charging
Light On	Indicates that Loner M6 is fully charged
Light Off	Indicates that Loner M6 is not charging

Turning Loner M6 On

1. Press the Power Button to turn Loner M6 on. The beeper, the alarm status light and vibration motor will chirp once. The SureSafe power button indicator light will blink as Loner M6 connects.

❖ Loner M6 needs to have sufficient battery power to connect to the Blackline Safety Network. Establishing this connection typically takes approximately one minute, but may require longer in some situations.

❖ If Loner M6 fails to connect to Blackline's servers, the green SureSafe light on Loner M6 will flash and if enabled, Loner M6 will enter a no-communication alarm state. See the Loner M6 local alarms section for more details.

Turning Loner M6 Off

When you no longer require Loner M6 to monitor your safety, follow these steps for turning off the device:

1. Press and hold the Power Button for approximately three seconds until Loner stops beeping to power the device off.
The beeper will sound three long beeps while the power button is pressed. The vibration motor vibrates for three long pulses. The beeper, vibration motor and Power Button Indicator Light will turn off after the shutdown is complete.

❖ The Loner M6 will flash the indicator light array during the shutdown sequence.

❖ If Loner M6 is plugged in to charge, it will automatically turn off to avoid false alerts.

Loner M6 Green SureSafe Indicator Light

Loner M6 features a green Suresafe Power Button Indicator Light. Please see below for the light behaviour.

Green SureSafe Light Behaviour	Description
Light flashing	Indicates Loner M6 is powered and connecting to Blackline's monitoring infrastructure via the wireless network, or logging off the server.
Light on continuously	Indicates that Loner M6 is powered and connected to Blackline's Safety Network via the wireless network.
Light off	Indicates that Loner M6 is powered off or the battery is depleted.

❖ Loner M6 is referred to as being offline and is not connected to Blackline's monitoring infrastructure when the SureSafe Indicator Light is blinking or the device is powered off.

❖ Loner M6 is referred to as being online and connected to the to Blackline's monitoring infrastructure when the SureSafe Indicator Light is on continuously.

Loner M6 Local Alarms

Loner M6 features audible, tactile and visual indicators for annunciating different types of messages. Please see below for these patterns.

Type	Beeper	Vibration motor	Indicator light array
Pending Alarm	Slow alarm pattern	Single repeating vibrate	Slow flash
High alarm	Fast alarm pattern	Double repeating vibrate	Fast flash
Low battery	Single beep once every 5 minutes	No vibration	Single flash once every 5 minutes

Alerts & Notifications

Automatic and manually triggered safety alerts are communicated to monitoring personnel. Alert messages are configured for Loner M6 through the Loner Portal user account. Loner Portal displays alerts and they can be sent via email and text to safety monitoring personnel.

Understanding Alerts

An alert is a message that communicates a potential safety incident, such as an Emergency Alert. Alerts are related to potential safety incidents and require life-cycle management by monitoring personnel within Loner Portal. Depending on the priority level of the Alert and per your organization's emergency response protocol different action must be taken by safety-monitoring personnel.

Alert	Explanation
Emergency alert	Loner M6 sends an Emergency Alert if the Emergency Latch has been pulled.
Silent alert	Loner M6 sends a Silent Emergency alarm if the acknowledge button is pressed until vibration stops (about 3 seconds)
Fall impact detected alert	Loner M6 sends a Fall Detected Alert when the device has detected a fall AND you have not pressed the confirm button within the configured amount of time.
No-motion alert	Loner M6 sends a No-motion Alert when the device does not detect motion for 2 minutes AND you have not canceled the pending message within 30 seconds.
Missed check-in alert	Loner M6 sends a missed Check-in alert when you have been prompted to check in and you have not cancelled the pending alert.
Voice call alert	Initiated when the Loner M6 receives an incoming call from monitoring personnel. The device will go into high alarm, accompanied by a blue light. The alarm will stop once the call has been received. The blue light will remain on until the alert has been resolved.

❖ All alerts are configurable.

❖ Speak to your safety team to learn what features have been implemented for your Loner M6.

Understanding Notifications

A notification is a message that communicates a system level event to monitoring personnel, such as a Low-battery Notification. These messages describe how the overall Loner system may not offer safety monitoring coverage at the present time, or in the future.

Notification	Explanation
Low-battery notification	Loner M6 sends a Low-battery Notification if the internal battery level falls below 20% by default
On-network notification	Loner M6 sends an On-network notification when it has logged onto the Blackline Safety Network
Off-network notification	Loner M6 sends an Off-network notification when it has logged off the Blackline Safety Network due to being deliberately powered down.

Confirmation of Alerts

Loner M6 will activate its blue confirmateion LED on the left and right sides of the indicator light array when monitoring personnel has acknowledged an alarm sent by the Loner M6. Once monitoring personnel have resolved the alarm, the light will shut off. If an alarm is generated while the confirmation light is on, the light will turn off until the new alarm has been acknowledged.

Initiating an Emergency Alert (Emergency Latch Use)

To trigger an emergency alert:

1. Open the Emergency Latch. Loner M6 will instantly send an Emergency Message to Blackline Safety Network and monitoring personnel. Loner M6 will annunciate the high alarm pattern to notify others nearby of the event.

❖ This alert maybe optionally be disabled. Contact your organization's safety team regarding how your Loner M6 is configured.

❖ The alarm pattern on Loner M6 will continue until the Emergency Alert has been canceled or the battery is depleted.

Silencing the Emergency Alert

1. Return the Emergency Latch to the closed position.

2. Press and hold the confirm button until the alarm stops, approximately 3 seconds. The alarm pattern will be silenced and Loner M6 will return to regular operation.

❖ If the user silences an Emergency Alert, this does not cancel the alert within the Loner Portal monitoring account. Monitoring personnel are required to manage safety through to resolution.

Initiating a Silent Emergency Alert

If you are in an emergency situation where you would prefer to not alert others in the area ,a silent emergency may be triggered, perform the following:

1. Push and hold the confirm button until the vibration stops - two full pulses, Loner M6 will vibrate for 3 seconds, pause and then vibrate for 2 more seconds. A Silent Emergency Message will be sent to monitoring personnel.

❖ Loner M6 will NOT annunciate the alarm pattern (it will remain silent).

❖ Loner M6 will return to normal operation. You cannot cancel the Silent Emergency. Monitoring personnel are required to manage the safety alert through to resolution.

No Motion Detection

Loner M6 is constantly monitoring your motion to detect a possible person -down motionless incident. If Loner M6 has not detected motion within a programmable time period, it will prompt you to confirm your safety, entering the alarm mode and annunciating the low alarm pattern. If you do not require assistance, you have 30 seconds to cancel the alert by pressing the confirm button.

❖ The time window and sensitivity of No-motion detection are configurable in the Loner Portal.

Cancelling a Pending No-motion Alert

1. Press the confirm button until the alarm pattern is silenced (about 1 second and Loner M6 will return to regular operation.

Silencing a No-motion Alert

If you have not cancelled the alert within 30 seconds, the No-motion Alert is communicated to monitoring personnel, initiating the alert escalation process. Loner M6 will annunciate the high alarm pattern and will continue until the alert is silenced or the battery is depleted.

1. Press and hold the confirm button until the alarm pattern is silenced - approximately 3 seconds. Loner M6 will return to regular operation.

❖ If the user silences a No-motion alert, this does not clear the alert within the Loner Portal monitoring account. Monitoring personnel are required to manage the safety alert through to resolution.

About Checking In

Loner M6 can be configured in Loner Portal to request a periodical check-in. During the Check-in period, Loner M6 will enter the alarm mode and annunciate the low alarm pattern to indicate a pending Missed Check-in alert. If you do not require assistance, you have 30 seconds to check-in and avoid a false alarm.

Checking In

1. Press the confirm button until the alarm pattern is silenced (about 1 second and Loner M6 will return to regular operation.

Silencing a Missed Check-in

If you have not cancelled the alert within 30 seconds, the Missed Check-in Alert is sent, initiating the alert escalation process. Loner M6 will annunciate the high alarm pattern until the alert is cancelled or the battery is depleted.

1. Press and hold the confirm button until the alarm pattern is silenced - approximately 3 seconds. Loner M6 will return to regular operation.

❖ If the user silences a missed Check-in alert, this does not clear the alert within the Loner Portal monitoring account. Monitoring personnel are required to manage the safety alert through to resolution.

About Fall Detection

Loner M6 is constantly monitoring your motion for falls. If Loner M6 detects a fall impact, it will enter the pending alarm mode and annunciate the low alarm pattern to indicate a pending Fall Detected alert. If you do not require assistance, you have 30 seconds to cancel the alert.

Cancelling a Pending Fall Detected Alert

1. Press the confirm button until the alarm pattern is silenced (about 1 second and Loner M6 will return to regular operation.

Silencing a Fall Detected Alert

If you have not cancelled the alert within 30 seconds, the Fall Detected Alert is sent to monitoring personnel, initiating the alert escalation process. Loner M6 will annunciate the high alarm pattern and will continue until the alert is cancelled or the battery is depleted.

1. Press and hold the confirm button until the alarm pattern is silenced - approximately 3 seconds. Loner M6 will return to regular operation.

❖ If the user silences a fall detected alert, this does not clear the alert within the Loner Portal user account. Monitoring personnel are required to manage the safety alert through resolution

Voice Call Functionality

If enabled with the voice service plan, Loner M6 has the capability to receive calls from the monitoring personnel to provide assistance during the management of an alert.

Receiving a Voice Call

1. When a voice call has been initiated, the device will annunciate the high alarm pattern accompanied by a blue flashing light.

2. To silence the high alarm, press and hold the confirm button on the latch until the alarm stops, approximately 3 seconds. The blue light will continue to flash, signifying that an incoming call has been initiated.

3. Once the caller has been connected, the device will generate a long beep signifying the beginning of two-way voice calling.

4. If the device is attached to your hip, remove and hold Loner M6 near your face, as you would a two-way radio. If the device is attached to your chest pocket, no removal is necessary.

5. Once the call is complete, the caller will end the call by resolving the alert. The device will generate a long beep signifying the end of the call. The device user cannot end the call from the Loner M6 device. The blue light on the device will go off once the call has ended.

❖ During a two-way voice call, the volume can be switched between the high and low levels by pressing the confirm button on the latch once.

Low Battery Notification

Loner M6 monitors the battery level of the device. If the battery level drops below 20% of battery capacity (configurable), a Low Battery Alert will be sent to monitoring personnel and Loner M6 will annunciate the low battery notification alarm

Loner M6 will continue all of the alarms until one of the following occurs:

❖ Loner M6 automatically shuts down with a depleted battery or when Loner M6 is plugged in for charging.

❖ Loner M6 sends a Loner M6 Powered Off by Low Battery message to Blackline's Safety Network before finally powering off.

Specifications

Size & Weight
Size: 63 mm x 107 mm x 22 mm (2.48" x 4.213" x 0.87")
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 | **Worker motion monitoring:** Configurable time window (1—30 min, or off) | **Worker check-in:** Required check-in period (5—180 min, or off) | **Voice calling:** Two-way and one-way (listen-only) phone calling (requires a voice-enabled service plan)

Buttons & Indicator Lights
Power button: Power on/off | **Check-in button:** Check-in/silent emergency **Emergency latch:** Send emergency alert | **Red indicator light array plus vibration and beeper:** Safety alert triggered | **Blue indicator light array plus vibration and beeper:** Incoming voice call | **Blue indicator light:** Alert has been acknowledged in the portal | **Green SureSafe light:** Blinking (powered), continuous (connected)

User Notification
Indicators: Speaker, LEDs, and vibration motor | **Speaker sound pressure level:** ~90 dB @ 10 cm (~90 dB @3.94") | **Voice calling:** Speakerphone and phone modes

Wireless Communication
Radio: Dual-band 3G (1900, 850 MHz) | **Antenna:** Internal dual-band | **Bidirectional communication:** Yes | **Firmware upgrade over-the-air (FOTA):** Yes

Location Technology
GPS Radio: 48-channel high sensitivity, mobile assisted | **Remotely-assisted GPS:** Yes
GPS Accuracy: ~5 m (16 ft) Outdoors | **GPS Real-time location turnaround time:** ~20 seconds
Loner Beacon compatible: Yes

Alert Messages
Fall detected/emergency latch/silent emergency/no-motion/missed check-in/voice call alert/low battery/power off

Power & Battery
Rechargeable Li-ion battery: 1200 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℉ to 167℉)
Operating temperature: -20℃ to 55℃ (-4℉ to 131℉)
Charging temperature: 0℃ to 45℃ (32℉ to 113℉)
Ingress Protection: Designed to meet IP65

Approvals
FCC Part 15 Subpart B, FCC ID: XPYSARAU260, Industry Canada 8595A-SARAU260 | Designed to meet BS 8484

Device Requirements
Blackline Safety service plan | 3G wireless communication coverage | GPS signal coverage required for GPS locating | Loner Beacon signals for precise indoor positioning

Warranty
One-year limited factory warranty

Wireless coverage and service plans
Wireless coverage: ~200 countries | **Service plan options:** Silver (for self-monitoring) and Gold (24/7/365 live monitoring included), with and without voice calling | Contact Blackline for further details

Loner Portal Web Application
Features include: Alarm banner, initiate voice call, event history, device location mapping, device management, alert & notification settings, and more.

Loner M6 Care

Consideration Regarding Use and Storage of Loner M6

Loner M6 meets IP65 ingress protection ensuring that under normal operation no dirt or water can enter the device.

Storage temperature range: -30 to 75°C (-22 to 167°F)
Operating temperature: -20 to 55°C (-4 to 131°F).
Charging temperature: 0°C to 45°C (32°F to 113°F)

❖ More details can be found in the specifications section.

Customer Care

Customer Care from our headquarters in Calgary, Canada is available between the hours of 8 AM and 5 PM Mountain Time. Customer Care from our office in the United Kingdom is available between the hours of 8 AM and 5 PM Greenwich Mean Time.

North America toll-free: **1-877-869-7212**
Americas telephone: **+1-403-451-0327**
Americas email: **support@Blackline Safety .com**
Europe and international telephone: **+44 1787 222684**
Europe and international email: **eusupport@Blackline Safety .com**

Web: **www.blacklinesafety.com**

Wireless Coverage
Loner M6 provides wireless coverage within most populated ares of Canada and the United States and can be extended to nearly 150 countries. Contact Blackline Safety for more information.

blacklinesafety

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www.blacklinesafety.com