

# mag checks



## MAGCHECKS INTRUSION DETECTION SYSTEM

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SAT IDS USER GUIDE

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“Security is always excessive until it’s  
not enough”.

## CONNECT



- To communicate in areas where cellular coverage is poor, your device utilizes the Iridium Satellite Networks SBD ( short burst data) service. Located inside of the gateway enclosure and external to the magazine, this component must always be facing up with an unobstructed view of the sky.
- To identify users, your device uses NFC( near field communication). Each authorized user is issued a key fob containing a unique serial number. When held near the “NFC-TAP HERE” decal on the left-hand side of the gateway, the serial number can be read and transmitted back to Magchecks Ltd. website. Authorized user access will be recorded for audit purposes, while unauthored access will result in an alarm event being triggered.
- The NFC reader is activated shortly after the door is opened and when the lid of the gateway is removed.

## ACCESS



- An audible long beep will be sounded (approx. 5 seconds) once the system detects a door or lid event. Once triggered the user has approx. 10 seconds to place their assigned NFC key fob near( <1cm) the reader.
- Once the users NFC key fob is successfully scanned, the gateway will sound another audible “short three beep” signal. The duration of the 10 second scan period will continue to count down.
- After 10 seconds the event( door/lid - open/closed) will be transmitted along with the credentials contained in the NFC key fob.
- The system will re-arm once the door is closed and requires no user action.
- If the door is opened and continues to be left open for more than 4 hours, a notification will be generated.
- Doors disarmed via the Web Portal Dashboard will auto-rearm after 15 mins if no door activity is recorded.

# ALARMS



- Three company contacts are elected to receive the “Critical” Alarm Alerts. Alerts are delivered via SMS message. Those alerts are: “Unauthorized Door Open” and “Unauthorized Gateway Lid Open”.
- The three contacts are messaged in a loop, with 15 min intervals until the alarm is acknowledged. The SMS message needs to be copied in whole and replied too. Users should “copy” the entire message, then “paste” and reply.
- Alarms can also be acknowledged via the web portal.
- All other notifications are delivered to one main company contact via email. Those can be “Door Open Too Long”, “Low Battery” and “Missed Check In”.
- All events are recorded on the web portal for audit purposes.

# NOTIFICATIONS



- In order to alert the company of items requiring attention, email notifications are sent. These notifications are noted on the web portal and allow the users to make notes and change the status of the event. “New” events can be marked as “ Acknowledged” or “Resolved” . A comment section is also provided.
- A “Missed Check In” event is generated when a device has not communicated with the web portal for 24 hours. This could indicate poor signal quality( poor magazine placement, snow accumulation etc.)
- Other potential causes are tampering or a device failure.
- Low Battery events are sent with sufficient notice to dispatch personnel to replace batteries.
- Door Open Too Long events are customizable by company. A 4-hour maximum is allowed. The default is 3 hours.

## SENSORS



- Door Sensors utilize Bluetooth Technology to communicate with the Gateway.
- Door Sensors are mounted internally and use a magnet & sensor scheme to detect the position of the door.
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- Bluetooth is a low power & short-range radio technology ideal for security applications.
- The gateway must be placed close enough to the door being monitored to allow communication between the two components.
- The gateway contains another wired magnetic proximity sensor that detects the presence on the lid.

# BATTERIES



- Both the gateway and door sensors use ER18650 batteries.
- Depending on the temperature range the system is expected to operate in, several versions of ER18650 can be used.
- For cold weather applications, the Fenix ARBL18 2900L is the battery provided. It is both rechargeable and rated to -40C.
- For mild climates, more popular Sanyo/Panasonic 18650 cells may be used.
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- Users can purchase spare batteries and a compatible 18650 charger (please contact for a list of suppliers).

# APPROVALS

US



This device complies with part 15 of the FCC Rules. 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.

- The following approvals apply to gateway components:

BLE

- FCC ID:2AEMI-ARGN
- IC: 20127-ARGN

SBD

- FCC ID:Q639603
- IC: 4629A-9603

LTE CAT 1/M1

- FCC ID: 2AEMI-ONE40X
- IC: 20127-ONE40X

- The following approvals apply to the door sensor:

- FCC ID:SQGBL654
- IC: 3147A-BL654



# APPROVALS CANADA



This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- this device may not cause interference.
- this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- l'appareil ne doit pas produire de brouillage, et
- l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.

Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.