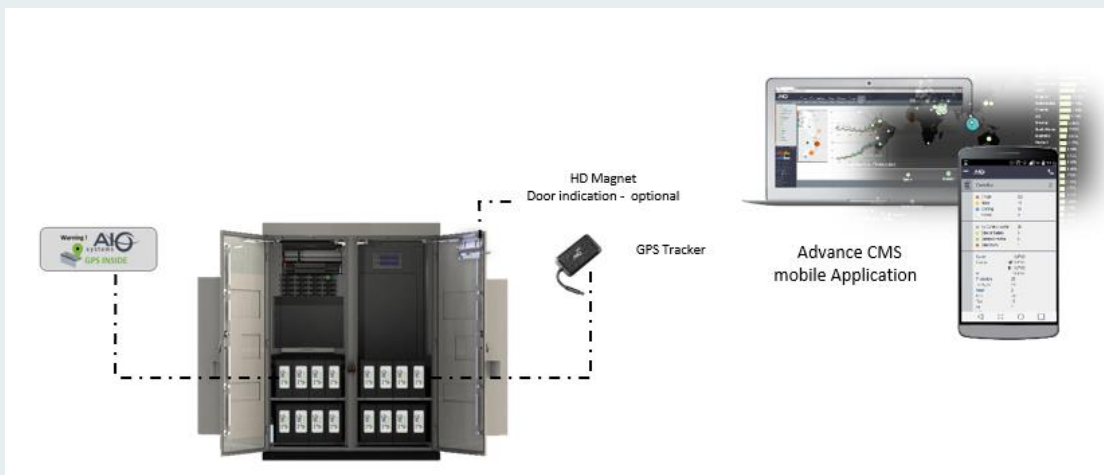


All in One IOT Remote Management

Transforming Data into
Measurable Business Growth

GPS Tracking Solution:

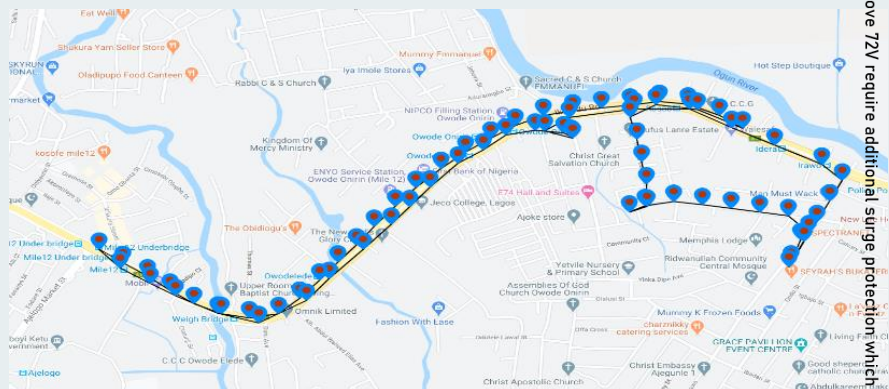
AIO's GPS tracking solution provides a unified solution to track Batteries, Generators, Solar Panels and various equipment and personnel. Integrated with AIO CMS, translates to a single point All-in-One, Asset tracking, Mobile app personal.



network management system

AIO Proposed Solution

Sites batteries are one of the main critical site assets required for ensuring quality service availability. Batteries theft prevention and an indication of suspected theft cases are vital for preventing downtimes, penalties, Losses, and high expenses. To minimize the risks of theft, AIO proposes using the below solution.



*Disclaimer: * Specifications subject to change without prior notice * Voltage supply can only be within specified range. Peaks above 72V require additional surge protection which isn't included

Application Note – GPS Tracking Solution



Value Proposition

AIO's GPS tracking solution provides a unified solution to track all equipment and personnel. Integrated with AIO CMS, translates to a single point All-in-One HR and Asset tracking network management system

Main Features

- Location and movement alert
- Vibration alarm
- Overspeed alarm
- Wire-cut alarm
- SIM communication
- Rechargeable via USB
- Plug and play installation
- Real-time information visible on CMS map and the GPS report
- Low battery alarm
- Deep Sleeping Mode
- Keep alive from CMS



Typical Application Drawing

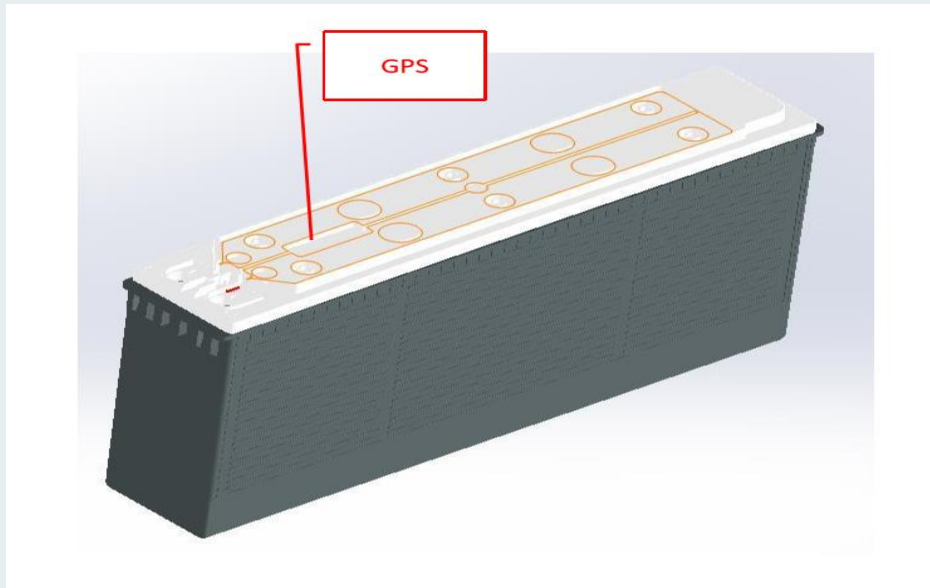
Application Note – GPS Tracking Solution



"See" your batteries location at real-time GIS Map using AIOT Tracing GPS unit

AIO's accurate and reliable GPS tracking solution for batteries and assets provides the capability to track the location of any equipment anywhere on the globe in real-time. The information is uploaded to the cloud-based CMS enabling real-time representation and movement history archives.

With reliable GPRS communication and a built-in battery, tracking cars or equipment becomes easy and convenient. The GPS supports sleeping mode and movement sensors for long battery life .



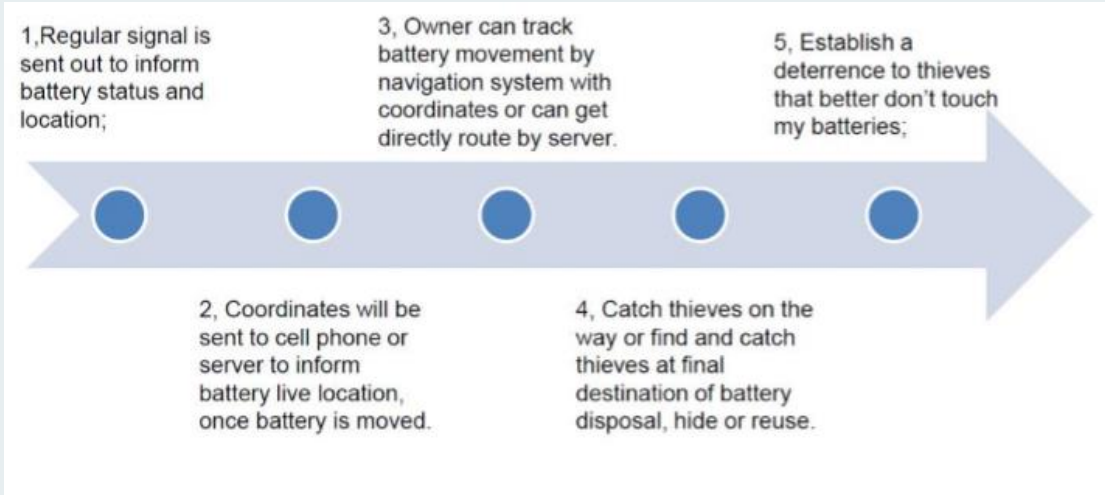
Enclosure Example

The GPS card insert to the battery chamber. The GPS tracker slot dimensions are: 70X50X10 mm

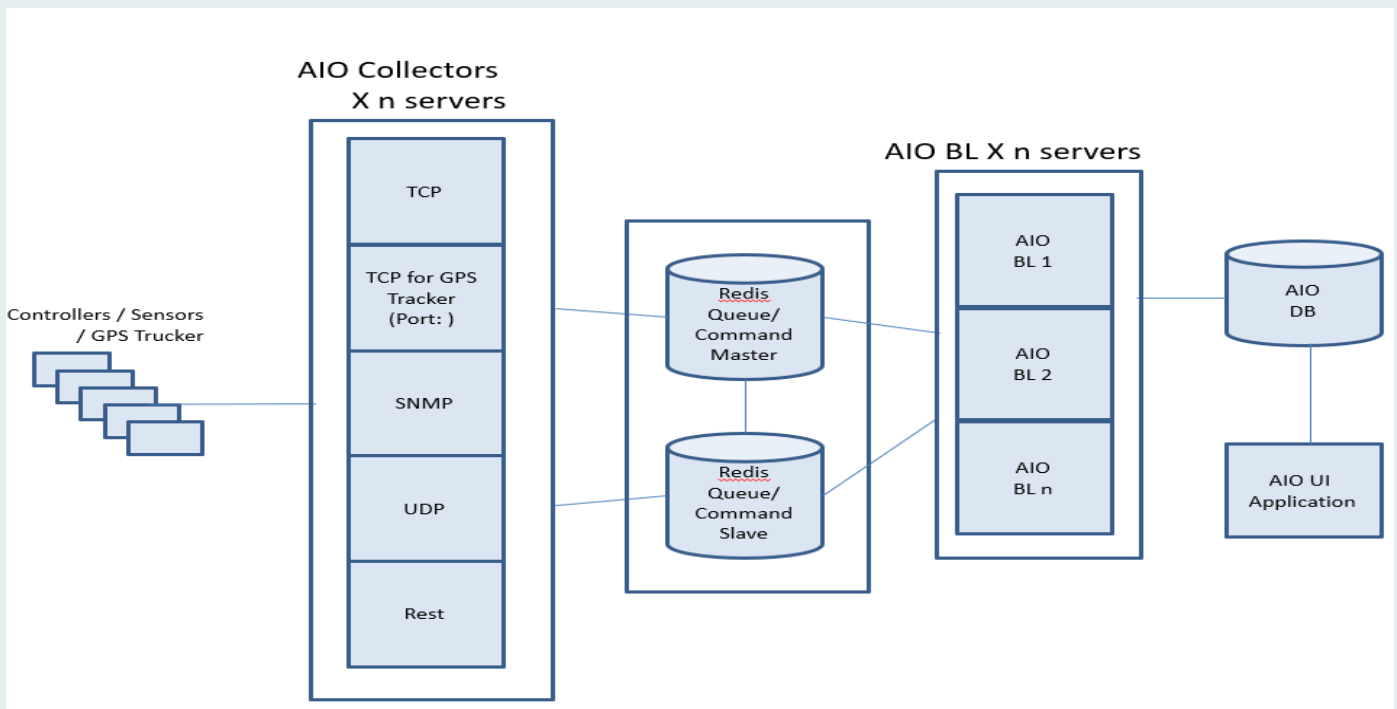
Application Note – GPS Tracking Solution



Working principals



Communication diagram



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Application Note – GPS Tracking Solution



Security

The AIO GPS Tracker security uses the secured pre-configuration process, Cellular APN security network, and authentication process of each message sent by the GPS tracker to the CMS

Secured pre-configuration process:

1. Login to the CMS with authorized username and password (same as any CMS user)
2. Every GPS tracker equipped with SIM Card ,
3. Configure the GPS tracker in the CMS
 - a. Per each site add GPS Tracker and the IMEI number of the SIM card belong to the site
 - b. The GPS tracker must be installed at the site where it allocated in the CMS, otherwise wrong location and error will be generated by the CMS, for example:

Site name: AAA

GPS Tracker with IMEI number 123457896523.

The installer must install this specific GPS tracker in site AAA .

4. Configure the APN on the GPS tracker (SIM card) to allow access to the cellular network

Any GPS tracker which not configured and not authorized in APN network will not be able to establish any communication with the cellular network.

Authentication & Authorization process during message's transmission

1. The GPS tracker send the Keep Alive periodically
2. The GPS Tracker send alerts upon event and periodically (configurable)
3. Per each message the GPS Tracker send the IMEI number to the CMS
4. The CMS match the IMEI number if no match the message will dropped. Error will be generated. If IMEI match process authorized
5. In case the GPS location does not match the location of the site CMS alert will be generated
6. Beside the CMS authentication & authorization process, APN process executed by the Cellular network operator

For additional information please contact

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