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## IET10 Datasheet

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Australia - New Zealand - Hong Kong - Macau

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# Seong Ji IET10 Locator

RC1, RC2, RC3, RC4

GPS Location   WiFi Geolocation   3D Accelerometer   Temperature   BLE OTA & Beacons   NFC   Tamper detect   Sigfox Bidirectional Communication

The IET10 from Seong Ji (formerly ieThings / Wisol) is a comprehensive asset locator capable of obtaining both outdoor and indoor locations using three different technologies - GPS, WiFi and BLE. Its long and thin form factor is especially suited for attaching to trolleys, bars etc. Onboard sensors are used to alert when removed from the asset, as well as monitor the asset movement and its local temperature.

- Geolocation via GPS and WiFi - Preference GPS location with WiFi fallback or vice versa
- Bluetooth Low Energy (BLE) for beacon scanning or advertising - Useful for indoor location
- Local OTA configuration & firmware download via Bluetooth 5.0
- Sigfox Single-zone capable (RC1, RC2, RC3 & RC4)
- 3D accelerometer & Motion Engine tailored for moving assets
- Internal temperature sensor with 5°C accuracy (or optional dedicated sensor with 1°C accuracy)
- Near Field Communication (NFC) for local scanning and quick Bluetooth pairing
- IP68 & IK10 housing (water resistant, dustproof & shockproof)
- Operating Temp -30°C to +85°C
- Magnet included - Optional and can be used for tamper detection via reed switch
- Up to 10 years battery life from 2 Sigfox messages transmitted/day
- Warranty 1 year

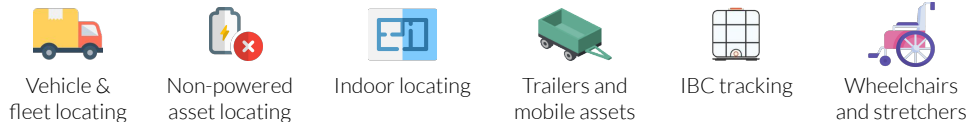


Manufactured by



Magnet Included

## Applications



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[www.thinxtra.com/iet10](http://www.thinxtra.com/iet10)

## Environmental

Housing	Soft touch Polycarbonate IP68, IK10
Operating Temperature	-30°C to +85°C
Storage Temperature	0°C to +30°C (Relative Humidity <60%, minimising battery discharge)
Dimensions & Weight	170 x 20 x 27 mm, weight 95 grams
Labelling	External Label - QR code and text

## Sensors

3D Accelerometer	Motion detection from accelerometer can be used for an energy saving algorithm as well as motion alarm
Temperature	Internal temperature sensor, accuracy to 5°C Dedicated temperature sensor with 1°C accuracy is also available upon request (subject to availability) <i>Note: Temperature change will be delayed due to the high IP rated casing</i>
Reed Switch & Magnet	For detecting if the device has been removed from the asset

## Power

Battery	2x ER14505 3.6V LTC batteries, total 5400mAh capacity - Non replaceable
Standby Current	18uA
Sleep Current	3uA

## Tracking

Wi-Fi Geolocation	2.4GHz 802.11b/g/n - Obtain indoor and outdoor locations by connecting with a Wi-Fi location service platform - Especially suited for high density urban areas
BLE	Indoor location by using BLE beacon, Low power consumption, cost effective but beacon infrastructure is required (Beacons or Gateways) Device can be a beacon or a gateway By default, scanning 'iBeacon' BLE beacons with specific UUID is supported
GPS	Satellite-based geolocation. High precision in good environmental conditions (e.g. open sky and clear day and no obstacles towards the sky), however it is not efficient for indoors or between buildings or when no clear view of the sky and satellites, which increases battery consumption and results in less accuracy.

## Connectivity

Sigfox	Single-region RC1,2,3,4 - Bi-directional comms - Class 0u
Bluetooth 5.0	For local FOTA (Firmware Over The Air), configuration, connection to peripherals.
NFC	Tag-A support
Wi-Fi	Used for geolocation

## Device Smarts

Adaptive Tracking	Change location acquisition frequency based on motion
Comprehensive Locating Ability	Utilise 3 technologies for obtaining indoor & outdoor locations (BLE, GPS, WiFi). Preference GPS location with WiFi location fallback or vice-versa
Event Detection	Detect when asset has moved & stopped, temperature change, or when device has been removed
OTA Configuration Updates	Device behaviour is configurable remotely via Sigfox or locally via Bluetooth.
Local OTA Firmware Updates	Firmware can be updated locally via Bluetooth
Battery Status / Life	Battery voltage measurement is communicated via Sigfox messages
3rd Party Sensor Integration	Bluetooth capability can be used to integrate with a 3rd party sensor (Custom firmware required)
Customisable Firmware	Custom firmware versions are possible for large orders (e.g. to customise Bluetooth or firmware logic) Contact ThinXtra for more info