

# PQ - GPS

# 2G/3G CELL, Sigfox

## Battery-Powered, IP67 Rated, Compact GPS Asset Tracker



The PQ-GPS is a rugged, waterproof, cellular GPS tracking device designed for tracking non-powered, exposed assets where super-long battery life is essential.

### FEATURES

Up to 5 years once daily location

Up to 2 years detailed tracking

IP67 water and dust proof

Rugged, robust and low profile

Off-the-shelf, replaceable Lithium AA batteries

No install required, simply "place 'n trace"

Switch from "locate" to "track" over-the-air

Battery status and low battery alert

Unauthorised movement alert

Integrated accelerometer

### APPLICATIONS



Vehicle and  
Fleet tracking



Non-powered  
Asset tracking



Equipment locate  
and recovery



Trailers and  
mobile assets



Shipping containers  
and freight



Anchoring and  
Security of assets



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## MECHANICAL SPECIFICATIONS

<b>Rugged IP67 rated housing</b>	The IP67 rated housing is made of sturdy ABS/Polycarbonate plastic to survive bumps and knocks and to survive many years in the sun and weather. It's low profile together with mounting tabs and 'strap slots' allow for easy mounting.
<b>Dimensions</b>	L 137 x W 72 x H 30mm
<b>Operating Temperature</b>	-20°C to +60°C  For operation in extreme temperatures, PQ-GPS must be fitted with Lithium batteries. Batteries are affected by temperature extremes and typical performance is dependent on temperature

## POWER

<b>3 x AA Batteries</b>	PQ-GPS uses 3 x "AA" size 1.5V Lithium Batteries. These are readily available from retail outlets, for example Energizer Ultimate Lithium.
<b>Sleep Current</b>	10uA (micro amps)
<b>Maximum Input Voltage</b>	6V Max, no reverse input protection

## OTHER

<b>Flash Memory</b>	Sufficient memory to store over 25,000 records. Normally data is sent to the server immediately but if the device is out of range there is space to ensure no data is lost. A future firmware version will allow for geo-fences to be loaded into the flash memory of the device and used for geo-fence alerting on the device.
<b>3-axis accelerometer</b>	The 3-axis accelerometer allows the PQ-GPS to 'sleep' in an ultra-low power state yet still wakeup when movement occurs. Future firmware versions will allow for harsh G-force detection (like assets being dropped or involved in accidents)

## CONNECTIVITY

<b>SIM Size</b>	Micro (3FF) size cellular SIM card. With sigfox no SIM.
<b>2G, 3G or 4G</b>	PQ-GPS can be manufactured for specific markets around the world with cellular modem modules approved by all the major networks.
<b>2G Modem</b>	Quad Band GSM/GPRS Class 10850/900/1800/1900 MHz
<b>3G Modem –EU</b>	850/900/2100 EMEA/APAC/Latin America
<b>3G Modem –NA</b>	850/1900/AWSNorth America
<b>Other</b>	Enquire for other bands and LTE/4G options. 4G LTE-CatM1/Nb-IoT model currently in development.

## GPS TRACKING

<b>GPS and Cellular Antenna</b>	Internal GPS and cellular antennas tuned by RF laboratories for optimal performance.
<b>GPS/GLONASS Tracking</b>	UBLOX MAX-M8Q GPS Module Concurrent GPS and GLONASS tracking 72 channel high sensitivity receiver-167dBm industry leading tracking performance
<b>AssistNowOffline</b>	AssistNowOffline aiding data or extremely fast time-to-first-fix and performance in urban canyon environments
<b>Low Noise GPS Amplifier (LNA)</b>	GPS signals are boosted by a special low-noise amplifier (LNA). This allows operation where normal units will fail to receive GPS signal -like in a container stack!

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## FIRMWARE SMARTS

<b>OTA Configuration</b>	PQ-GPS can be remotely configured and updated OTA (over the air)
<b>Auto-APN</b>	Auto-APN allows the PQ-GPS to analyse the SIM card and select the correct APN details from a list that is pre-loaded in the device's firmware.
<b>Multi-APN</b>	PQ-GPS can be configured to roam across multiple networks and automatically use the different APN details for the roaming networks
<b>Text Message Setup</b>	PQ-GPS can be sent text messages to set the APN, server and other details
<b>Recovery Mode</b>	PQ-GPS can be remotely switched into Recovery Mode which switches the device to do live tracking and reporting –so that you can get your asset back!
<b>G-Force Events</b>	A future firmware version will allow for harsh G-force detection (like assets being dropped or involved in accidents) and report these to the server
<b>Geo-Fences</b>	PQ-GPS has the capacity to hold hundreds of geo-fences that can be downloaded to it from the server and updated Over-The-Air. A future firmware version will allow the PQ-OBD to use this geo-fence information to implement geo-fence based alerting on the device.
<b>Adaptive Tracking</b>	PQ-GPS can be set to use Adaptive-Tracking technology where the accelerometer and GPS data are used to intelligently work out if it is moving and to send frequent updates, and to scale the update rate down to once per day if the asset is stationary -to preserve battery life.

## CERTIFICATIONS

**Certifications** CE, FCC, PTCRB, Canada, RCM, IC

