AlarmNet® GPS Vehicle & Asset Tracking Devices FAQs

How do GPS tracking devices work?

The GPS tracking device gathers position data from the GPS satellites. This information along with other asset data (such as; start/stop, speed, low battery, etc.) is then communicated, using CDMA cellular technology, to Honeywell's AlarmNet monitoring center. The customer can monitor this information using their Total Connect Remote Services® account. Click here to view see an overview.

How can these devices be used?

They are used to track outdoor assets such as vehicles, boats, utility equipment, and storage containers just to name a few.

These devices work with a Honeywell Total Connect Remote Services account. **The account must be a Total Connect 2.0 account.**

Where is this service available?

Service is offered in the continental United States and Hawaii.

What models are available?

Currently we have three models, TCVT2, TCAT, and the TCAT-EB.

TCVT2 — This is specifically for OBD II compliant vehicles. That includes most vehicles manufactured after 1996. It plugs into the vehicle's OBD II port.

TCAT — This is a good choice for non-OBD II compliant vehicles, older classic cars, boats, jet skis, motorcycles, construction equipment, and more.

- Requires 12-24VDC asset power, or may be run by its internal backup battery.
- Water, vibration and shock resistant.

TCAT-EB — This is ideal for assets without constant power; such as shipping containers, heavy machinery, outdoor inventory, and more.

- Requires 12-24VDC asset power, or may be run by its internal Extended backup battery.
- Water, vibration and shock resistant.

What is the purpose of the OBD port?

The OBD (On Board Diagnostics) port allows diagnostic equipment to access the vehicle's computer and collect data, measurements, and error codes. Specifically the TCVT2 uses this port to access the vehicle's speed, and other information.

What plans and features are available?

Feature	Basic	Enhanced
Up to 20 asset trackers per location	x	x
Low battery notifications	x	x
"Locate Now" requests (60 per month)	x	x
Geo-Fences (up to 8 per device) with Entry/Exit alerts	x	x
Asset Moving / Asset Stopped information (TCAT-EB only)	x	x
TCVT2 unplugged / restored notification	x	x
Selectable Speed Alerts (TCVT2 and TCAT only)		x
5-minute bread crumbing		x
Tracking Event History (90 days)		x

How many GPS devices can I have?

Up to 20 devices for each account location. Each GPS tracking device is individually billed.

Can GPS Tracking services be a standalone service?

YES, this service may be standalone, or may be combined with other Total Connect 2.0 Remote Services.

Are these services compatible with Android and Apple mobile devices?

YES. Currently, for Android devices and smartphones, control functions are supported. Control functions and configuration functions are support using your PC web browser.

For the Apple devices, all control and configuration functions are supported. For Apple smartphones, control and most configuration functions are supported. (On the smartphone, creating geofences and some configuration functions are not supported.)

Does the GPS tracking device work indoors?

These devices require an unobstructed communication path with the GPS satellites, and therefore are for OUTDOOR use only. They may not work properly in a parking garage or covered facility or with an asset cover.

What happens if the TCVT2 vehicle tracker is unplugged?

That event is reported and appears as an "Unplugged" event in your Total Connect Remote Services account.

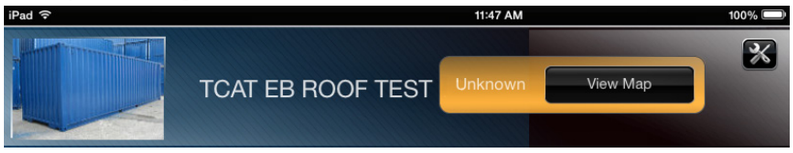
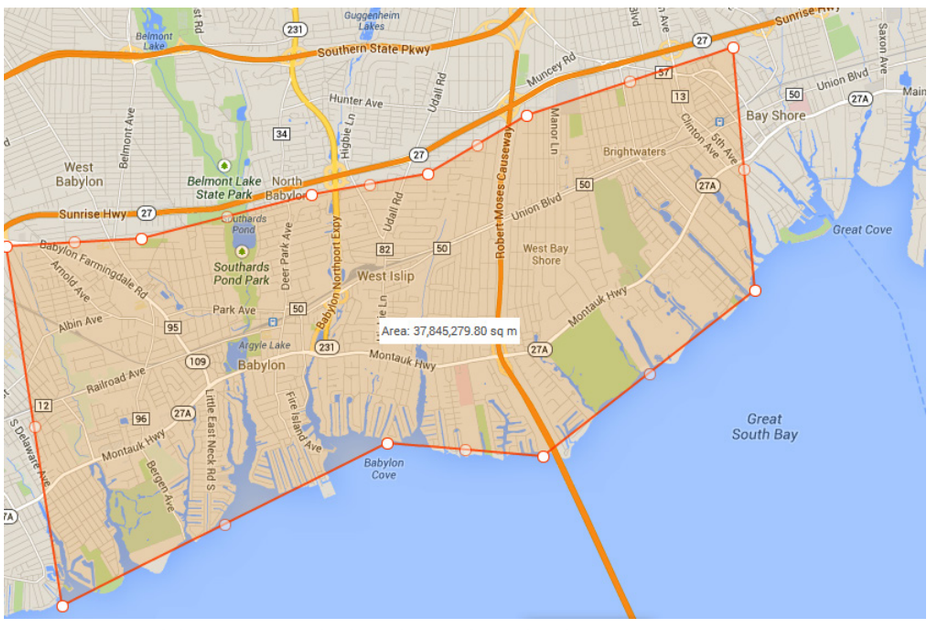
The TCVT2 has an internal battery that is sufficient to reliably report the unplugging event.

Does the TCVT2 vehicle tracker draw current from the vehicle battery?

YES. When the engine is ON there is no problem and the current draw is minimal. However when the vehicle battery drops below 11.5 volts, an alert is reported, the GPS is turned off, and the TCVT2 is placed in "sleep" mode to preserve battery life. During that state "Locate Now" requests do not respond.

The "Locate Now" feature is returned after the low battery condition is cleared by charging the battery.

Understand that for any vehicle that has old/weak batteries, especially in cold weather, even a very low battery drain may be significant over time.

What is the transition time of the speed alerts?	When the speed alert threshold has been exceeded an alert is typically received within 15 seconds.
When requesting a "Locate Now" how long does a response take?	Typically a response is received within 15 seconds. The response will appear on the map as an updated asset location and will appear in the tool bar Events tab. Understand that your device location (rural or urban), network traffic, server speed, and cell tower speed all affect the response time. When the device senses a low battery condition, an alert is reported, the GPS is turned off, and it is placed in "sleep" mode to preserve battery life. The "Locate Now" feature is returned after the low battery condition is cleared by charging the battery.
How long after a "Locate Now" request is made must I wait to send another request?	After activation, the "Locate Now" button will be disabled for 2 minutes.
How long must the asset be stopped to generate a stop key?	A stop key is generated by the TCVT2 and the TCAT (used in vehicles) when the vehicle has stopped for 2 minutes. The TCAT-EB asset tracker will generate a yellow event triangle, to mark its new location.
What does it mean when a device is in an unknown state?	For the TCVT2 and the TCAT you must create a geofence and have the asset cross the geofence. For the TCAT-EB, it must be moved once. This condition can also be caused by; a lack of power, or the asset is sheltered or covered thereby obstructing communications. 
Are the GPS asset trackers rechargeable?	The TCVT2 is powered from the vehicle battery and does not require charging. The TCAT is typically used for non-OBD II compliant vehicles, older classic cars, boats, jet skis, motorcycle, construction equipment. As such, it is powered from the asset's battery and does not require charging. When the TCAT is used on a non-powered asset, it requires periodic charging. Its internal battery is monitored and a low battery alert is reported to your Total Connect Remote Services account. The TCAT-EB is typically used for assets without constant power; such as shipping containers, heavy machinery, outdoor inventory. It has an extended battery that requires periodic charging. Its internal battery is monitored and a low battery alert is reported to your Total Connect Remote Services account.
Where can I find information on charging the GPS asset trackers?	Information is provided in the "Installation Guide", and the online help guide that is accessible through your Total Connect Remote Services account. The TCAT takes 4 hours to fully charge in cold weather. The TCAT-EB takes 10 hours to fully charge in cold weather.
What is the battery life of the TCAT-EB?	Battery life is dependent on many variables such as; proximity to a cell tower, how many daily location reports are made, and temperature. Under ideal conditions with only 1 daily location report the battery may last up to 2 years before charging is required. In addition, both the TCAT and TCAT-EB sense movement and report their position. Each message sent uses a small amount of power.
What is a Geofence?	It's a virtual boundary you can create around a geographical location or space. It defines an area, and allows you to be notified when an asset enters or exits that area.  IMPORTANT – If the asset is parked on the geofence border, erratic position reporting may result.

Satellites

24 GPS satellites (four satellites in each of six orbits) provide the GPS coverage.

Global Positioning System

Always listening for latitude and longitude using global positioning, the Global Positioning System (GPS) is a space-based satellite navigation system that provides location and time information in all weather, anywhere on the Earth, where there is an unobstructed line of sight to four or more GPS satellites.

GPS Devices

The GPS Vehicle and Asset Trackers are comprised of GPS satellite receivers combined with a cellular radio.

TCVT2
Honeywell Total Connect™ Vehicle Tracker

TCAT
Honeywell Total Connect™ Asset Tracker

TCAT-EB
Honeywell Total Connect™ Asset Tracker
(with Extended Battery)

Cellular Tower

GPS device transmits a signal every five minutes to cell tower (enhanced plan) and every 24 hours via the basic plan.

AlarmNet®

Speed, geofence and location alerts transmitted to AlarmNet®.

Honeywell Total Connect™ Tracking Services provide real-time location information to customers.