

TALLYMATICS® Extends Fleet Tracking from 2-Way Radio to Cellular based IoT

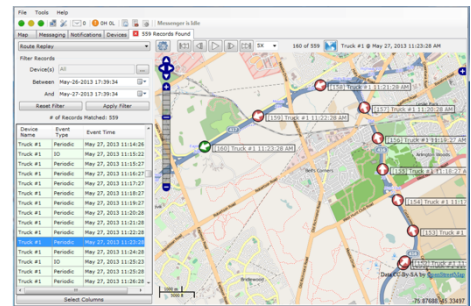


TALLYMATICS® has been delivering cost effective, high resolution fleet tracking for the 2-Way Radio market since 2009 with our feature rich TruFleet® Fleet Management application, 2-Way Radio applications, and Sprite® line of GPS trackers; incorporating our patented and proprietary Contrails data compression algorithm that allows excellent resolution over low bandwidth 2-Way Radio networks.

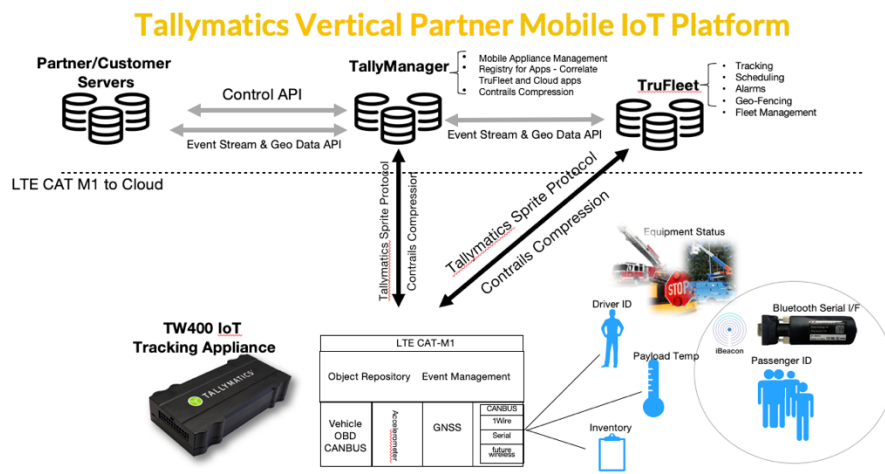
We are now using the experience drawn from this challenging 2-Way Radio network environment and combining it with the promise of the Internet of Things (IoT) eco-system to bring far superior positioning resolution and flexibility to the cellular telematics market, for partners and customers alike.

Introducing the Sprite® TW400 Mobile IoT Appliance and the TALLYMATICS Mobile IoT Platform.

The **Sprite TW400** is an LTE Cat M1 connected device, utilizing the excellent low bandwidth characteristics of this IoT focused cellular network to deliver fleet tracking, as well as vehicle On Board Diagnostic (OBD) information and event driven in-vehicle IoT peripheral connectivity for applications such as driver ID, asset management, and vehicle equipment status/control. The TALLYMATICS Mobile IoT Platform consists of:



- Sprite TW400 Mobile IoT devices;
- a cloud-based management portal, the TALLYMANAGER that provides activation, device management and communication with the TW400 devices and associated in-vehicle peripherals via industry standard APIs;
- Optionally, TALLYMATICS' feature rich TruFleet Fleet Management application



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Dramatically improve your positioning report accuracy without increasing costs

Let's face it, the accuracy of current geopositioning leaves much to be desired. The typical rate of reporting is 1 position per minute, which typically requires a 3 Mb data plan. If you want faster reporting (i.e. better resolution) you have to buy a higher plan which will be significantly higher priced. Your vehicles can move a long way in 1 minute, losing important detail that you would love to have if you could.

To deliver a more accurate trip report without increasing costs, your solution has to deliver the much more information with the same amount of bandwidth (or less). The Tallymatics IoT platform can accomplish this using our patented (and proprietary) Contrails data compression, developed for the 2-Way Radio market. The **TW400** in-vehicle IoT Tracking appliance encodes the tracking geodata in the very efficient Contrails format. We expand this compressed stream of geodata in the cloud in our TALLYMANAGER device manager and make it available via industry standard API's ...



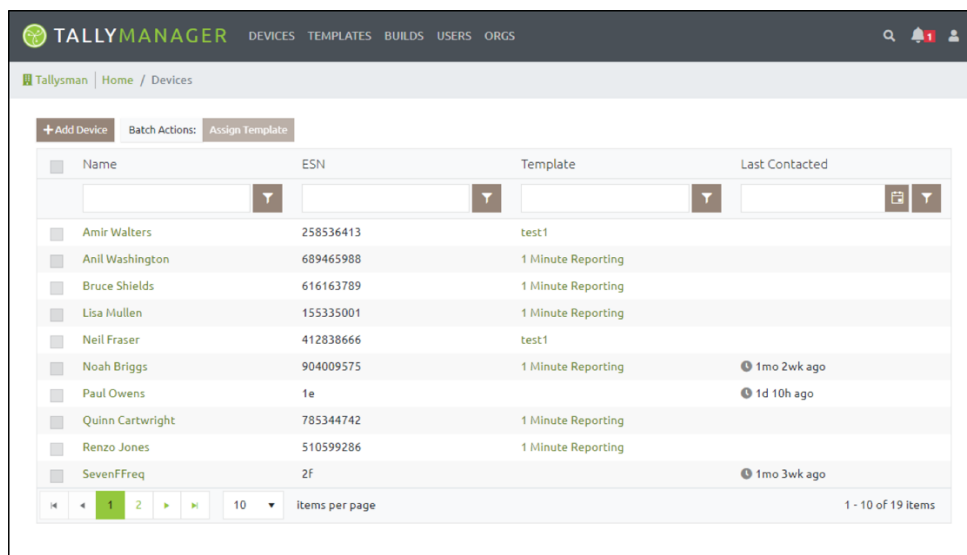
from a pure XML or JSON Restful interface, to industry specific API's such as **MultiSpeak®**. Contrails compression gives you 5 second positioning reported on a 1 minute basis 12 times the geodata with the same 3 Mb data plan.

In a nutshell, you can experience 12x resolution tracking with no price increase vs. typical cellular solutions, while enjoying access to the rapidly expanding LTE Cat M1 networks being rolled out throughout the world ... without the complications.

Easy, self-serve device management

One complication you will be relieved to avoid is the frustrating process of device activation and management. The cloud-based TALLYMANAGER device management portal serves as a one-stop shop for device management (SIM activation/deactivation, device configuration, firmware updates as we expand peripheral libraries, alerts etc.). Easy to use and future-proof, while offering management integration with back-office applications and easy communication to your devices over industry standard API's.

And yes ... the TW400 comes with cellular service included as part of the package.



Name	ESN	Template	Last Contacted
Amir Walters	258536413	test1	
Anil Washington	689465988	1 Minute Reporting	
Bruce Shields	616163789	1 Minute Reporting	
Lisa Mullen	155335001	1 Minute Reporting	
Neil Fraser	412838666	test1	
Noah Briggs	904009575	1 Minute Reporting	1 mo 2wk ago
Paul Owens	1e		1d 10h ago
Quinn Cartwright	785344742	1 Minute Reporting	
Renzo Jones	510599286	1 Minute Reporting	
SevenFFreq	2F		1 mo 3wk ago

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TALLYMATICS' GNSS expertise and LTE Cat M1 means better reception and cellular transmission, easier installation

We are wireless experts. Real Experts. TALLYMATICS' parent company, [TALLYSMAN® INC.](#) is a world leader in high performance Global Navigation Satellite Systems (GNSS) antennas. In the TW400, we have employed a TALLYSMAN proprietary high quality embedded Dual Capacitive Patch antenna which offers exceptional performance for location accuracy, even when operating under the dash without an external antenna.



We also use LTE Cat M1 as our cellular technology, which has higher power density paired with a performance optimized antenna offering better operational coverage than typical LTE. What does that mean for you? In many cases, it will probably make it unnecessary to use an external antenna. We also give you three GNSS constellations: GPS, GLONASS, and Galileo. If you don't require an external antenna, it is a significant simplification of the installation process. To get up and running, it is as simple as getting power. In most cases, power will come directly from the OBD port in the vehicle.

Untethered Dead Reckoning – For when you really need to know

Sometimes you need to go above and beyond what any ordinary GNSS receiver/antenna combo can do for you, even a great one. And for deep urban canyons, and or multipath environments (when that customer initiated audit calls for it), add our TW5262 GNSS Receiver/Antenna with Dead Reckoning to give the best results imaginable.



More than tracking ... IoT Application Platform for fleet verticals



Tracking vehicles is a great application, and in itself justifies deploying a managed tracking device like the TW400. However, in many fleets, there are infinite applications for wanting to connect to in-vehicle sensors and actuators, from driver ID, to passenger ID, to in-vehicle inventory/asset tracking, to equipment status (e.g. PTO on/off), to temperature sensing... the list goes on. Its almost a proverb that the solution you thought was perfect doesn't do that extra thing you need or want, or is incompatible with your existing infrastructure.

Normally, this is when you have to go to a high end in-vehicle wireless server and spend FAR more than you wish. We have a different solution.

Peripheral management and visibility via TALLYMANAGER portal

We have equipped the TW400 with built in resources and serial peripheral buses that can be accessed via the TALLYMANAGER using industry standard API's such as a simple RESTful API, or industry-specific API like MultiSpeak. We have a broad experience with custom API's, so please speak with us regarding your interface integration requirements. Define your application, peripherals, and protocol and we will work to connect them to your back-office through our cloud. So... what can you access?



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3 Serial Buses (CANbus, 1Wire MicroLAN, RS-232) and more

The TW400 has three industry standard interfaces that you can connect devices to and access via the TALLYMANAGER:

- The industry standard CANbus interface. CANbus is a very robust bus, and originates out of the need for reliable communications between vehicle engine computers over minimal cabling. On the TW400, you can use this to tap into the vehicle **On Board Diagnostic (OBD)** information ... AND you can use it to provide robust communication to peripherals throughout your target vehicle. RS-232 Serial allows a broad range of connectivity options you can quickly design to ... there are many adapters to wireless interfaces such as bluetooth that you can use to expand your peripheral space dramatically.
- 1-Wire® MicroLAN. This simple but effective bus has many sensors developed for it, among the most popular being temperature sensors and ID tags. Great for ensuring your temperature sensitive payload is within required range, or if you've got the right people or assets in the right place at the right time through tagging.
- RS-232 Serial allows a broad range of connectivity options you can quickly design to ... there are many adapters to wireless interfaces such as bluetooth that you can use to expand your peripheral space dramatically.



This is a lot of peripheral capability, but we do also give you some additional remote configurable I/O that you can use to connect in-vehicle equipment directly to the TW400: four digital inputs, three digital outputs and a wide voltage analog input!

Accelerometer

Vehicles are all about movement and perhaps acceleration. The TW400 is equipped with an onboard Multi-Axis MEMS sensor (Accelerometer) offering the possibility to monitor driver behaviour or trigger a static position event such as an impact. The monitored event data is relayed via our TALLYMANAGER portal.

Partner with us

TALLYMATICS is ready to help you develop your fleet application on our platform. We've given you a lot of potential, and we are ready to work with you to make it a reality.

Call us and let's talk about what you need.

