

# TW400

## Sprite<sup>™</sup> TW400, Fleet Tracker LTE Cat M1

### Overview

The Sprite TW400 is a robust telematic platform, that incorporates an LTE CAT M1 modem, multi-constellation GNSS/GPS receiver, powerful processing engine, and a triple-axis accelerometer for monitoring operator driving behaviour.

### Competitive Edge

The TW400 is designed for fleet tracking applications. The TW400 provides comprehensive mobile environment visibility. The cellular tracking device provides configurable event reporting of location, I/O, Odometer, Engine Idle times and driving behaviour.

The TW400 fleet tracking application uses TALLYMATICS' Contrails data compression algorithm to provide superior location reporting resolution while minimizing network data usage offering operational savings.

### Easy Installation and Management

The TW400 combined with TALLYMANAGER portal makes it easy to install in a vehicle and be up and running, installing, connecting to cellular networks, and configuring the device's onboard resources to tailor the information reported. The 20 pin molex connector provides options to meet various cabling requirements including direct power harness connection and connection to vehicle diagnostic ports such as OBDII and J1939. The pin out is also compatible with CalAmp devices.

Robust cellular transceiver design and superb built-in GNSS antenna allows flexible placement of the device inside vehicles, however there is an external antenna option and



the built-in serial port allows the connection of Smart Antenna/Receivers (e.g. TW5362) providing a range of enhanced capabilities such as precise location in "deep urban canyon" applications.

### Tallymanager Portal

The portal provides remote configuration and over the air firmware updates of TW400s. The web application provides an intuitive interface for easy of configuration and management. Updates are automatically pushed to devices over the air.

Status and diagnostic information for the TW400 devices are updated periodically in the portal so you can confirm operation. A map display provides feedback on periodic location of the devices.

### Features

- Multi-regional LTE Cat M1
- High sensitivity GNSS (GPS/Glonass/Galileo) receiver
- 20 Pin Molex locking connector, pin for pin compatible with CalAmp devices
- Internal/External antenna options
- Integrated RS232 for direct Peripheral connectivity
- Store and forward data integrity
- Available CANbus for OBDII and J1939 direct connect

### Benefits

- Easy to install and provision
- High resolution fleet tracking
- Motion sensing, hard braking, impact detection
- Automatic over-the-air configuration and firmware downloads
- Comprehensive Management Reports in TruFleet.Cloud SaaS
- Access to Tallymanager Device Management Portal
- Assured message delivery with up to 20K persisted messages
- Global access with carrier agnostic global SIM cards
- Proprietary lossless data compression lowers operating cost

# Sprite™ TW400 Fleet Tracker

LTE Cat M1

## Specifications

### Cellular Network

LTE module for multi-regional Cat M1/NB1  
North America.....LTE Cat M1, (Bands: 2,4,5,12 and 13)  
Micro Sim Access .....Ordered separatley (3FF)  
Contact for Global regional network compatibility.

### GNSS Satellites

GNSS (3-concurrent) .....72 channel support  
Aquisition Sensitivity.....-160 dBm Hot start -148 dBm Cold start  
Tracking Sensitivity .....-167 dBm  
Location Accuracy .....~ 2.5 m CEP 50%  
Location rate .....Up to 10Hz

### Antennas

Integrated GNSS antenna .....Dual feed w/ excellent mutipath rejection  
Integrated Cellular .....Multi-band w/ 100mm ground plane  
for Superior performance  
External Antennas .....Optional

### System Features

3-axis Accelerometer.....Event monitor, crash detection,  
behaviour insurance  
Status LED's .....GPS and Cellular status

### Certifications

.....PTCRB-CTIA, FCC, AT&T, CE, RoHS

### Connectors

20 Pin Molex Locking .....Compatible with CalAmp devices  
Optional external antennas .....SMA for GPS & SMC for Cellular

### Signal I/O

Ignition Input .....Active high (8V to 32V)  
4x Digital Input .....Active High (0.7V minimum Active  
3x Digital Output .....Open collector (200mA sink)  
1x Analog Input.....( 0V to 32V)  
2x Serial Ports .....2 wire RS-232 (option: 1xCAN / 1xSer)  
1-Wire (Dallas).....(ie: Driver ID or Temperature Sensor)  
3V3 DC Output .....Switched ( 50 mA)

### Electrical

Operating voltage .....8V to 32V  
Power Consumption.....Active nominal (60 mA)  
Standby (1 mA)

### Enviromental

Temperature .....-35C to + 70C  
Humidity .....95% RH non-condensing  
Shock & Vibration.....3 Axis sweep -15 min  
100 - 200 Hz log sweep 3G

### Mechanical

Dimensions .....4.625" x 2.15" x 0.87" (L/W/H)  
Weight .....110 gm

## Ordering Information:

<b>TW400 (Internal Antennas)</b>	<b>33-0400-000</b>
<b>TW400 (External antenna)</b>	<b>33-0400-010</b>
<b>TW400 (Internal w/CAN)</b>	<b>33-0400-100</b>
<b>TW400 (External w/CAN)</b>	<b>33-0400-110</b>



The **connection** of things.™

Tallymatics manufactures high performance, telematics products and solutions for a wide range of applications. With support for both RF wireless and data networks, Tallymatics enables high-resolution location awareness of mobile field assets across any type of wireless network. Tallymatics is a division of Tallysman.

© 2019 Tallymatics Inc. All rights reserved. Tallymatics, "The connection of things" tag line and the Tallymatics logo are trademarks or registered trademarks of Tallymatics Inc. and/or its affiliates in Canada and certain other countries. All other trademarks mentioned in this document are the property of their respective owners. The information presented is subject to change without notice. Tallysman assumes no responsibility for any errors or omissions in this document. Tallymatics is a division of Tallysman Inc. Tallymatics hereby disclaims any or all warranties and liabilities of any kind.

**Contact us:**  
[info@tallymatics.com](mailto:info@tallymatics.com)  
T: +1 613 591-3131

Tallymatics Inc.  
36 Steacie Drive,  
Ottawa ON  
K2K 2A9 Canada

[www.tallymatics.com](http://www.tallymatics.com)