



- Compact Size
- Easy Installation
- Crash Detection
- Firmware Over the Air
- Geo-fences
- Motion Detection
- Driving Behavior Monitoring
- BLE 4.0
- Support Fuel Level Sensor (8A/E and 10A/E)
- Support Temperature Sensor (10A/E)

LTE TLW1 Series

LTE Cat-M1(eMTC)/Cat-NB1(NB-IoT) GNSS tracking devices for wide ranging applications

- 48g
- 87mm × 35mm × 13.5mm
- 30°C ~ +80°C
- Operating Voltage: 7V to 32V DC With internal Li-Polymer battery

The TLW1 series includes 3 models which cover the mainstream scenarios such as fleet management, cold chain, transportation monitoring, etc. TLW1 series supports LTE Cat-M1 (eMTC) / LTE Cat-NB1 (NB-IoT) network on multiple band for operation in both North America, Australia and Europe.



LTE TLW1 Series Spec

Network/Operating Band			
Models	TLW1-4/8/10A (North America)	TLW1-4/8/10E (Europe)	
Operating Band	FDD: B1/B2/B3/B4/B12/B13/B17/B25/B28 TDD: B39 (Cat M1 only)	FDD: B1/B2/B3/B4/B5/B8/B18/B19/B20/B26 EGPRS 900/1800MHz	
Data Transmission	eMTC: Max. 300Kbps (DL), Max. 375Kbps (UL) NB1: Max. 32Kbps (DL), Max. 70Kbps (UL) EDGE: Max. 296Kbps (DL), Max. 236.8Kbps (UL) GPRS: Max. 107Kbps (DL), Max. 85.6Kbps (UL)		
GNSS Specifications			
GNSS Chipset	Qualcomm Gen 8C GNSS receiver		
Parallel GNSS	GPS+Glonass+Galileo+Beidou		
Receiver Type	33 tracking / 99 acquisitions- channel GNSS receiver		
Sensitivity	Cold start: -149 dBm Tracking: -163 dBm		
Position Accuracy (CEP)	Autonomous < 2m		
Standalone TTFF	Cold start: < 29s Warm start: < 27s Hot start: < 1s		
Interfaces			
Models	TLW1-4A/E	TLW1-8A/E	TLW1-10A/E
Digital Input	1	2	2
Digital Output	1	1	2
Configurable Input (Digital/Analog)	-	1	2
LTE/GNSS/Bluetooth Antenna	Internal only		
Indicator LED	Network and GNSS		
FOTA	Yes		
BLE (Bluetooth Low Energy)	4.0		
General Specifications			
Waterproof	IP66		
Dimensions	87mm*35mm*13.5mm		
Weight	48g		
Backup Battery	Li-Polymer 200 mAh/ 3.7V		
Operating Voltage	7V to 32V DC		
Operating Temperature	-30°C ~ +80°C (-22°F ~ 176°F)		
Storage Temperature	-40°C ~ +85°C (-40°F ~ 185°F)		
Air Interface Protocol			
Transmit Protocol	TCP, UDP, MQTT, SMS		
Protocol Check & Encryption Support	MD5/ AES256		
Scheduled Timing Report	Report position and status at preset intervals		
Geo-fence	Geo-fence alarm and parking alarm support up to 64 internal geo-fence regions		
Low Power Alarm	Alarm when backup battery is low		
Power on Report	Report when the tracker is powered on		
Tow Alarm	From internal 3-axis accelerometer		
Driving Behavior Monitoring	Aggressive driving behavior detection, e.g. harsh braking and acceleration		
Crash Detection	Accident data collection for reconstruction and analysis		
Remote Control	OTA control of outputs		
Network Signal Jamming Detection	Report network jammer		
Data Roaming Control	Avoid additional data consumption		