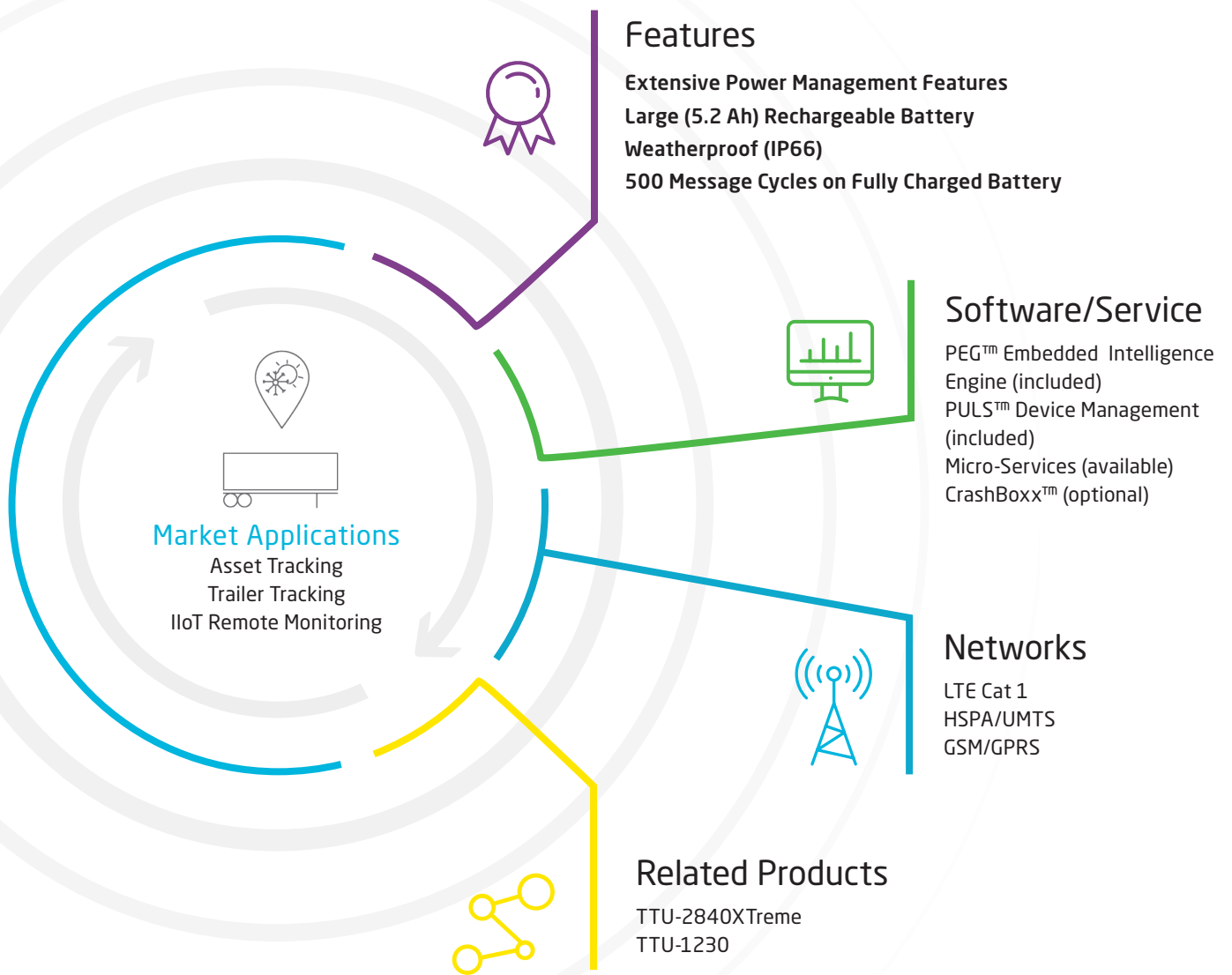


# TTU-2830™



## Versatile Asset Tracker Built for Flexibility, with Extensive I/O Capabilities and Excellent Field Performance

The TTU-2830™ weatherproof, complete vehicle tracking device is designed for reliable, long-term deployments and is ideal for assets that are tethered but may sit disconnected for periods of time. Equipped with a rechargeable battery pack, PEG's powerful engine, precise GPS technology, LTE Cat 1 and expansive I/O harness enables a broad array of use cases for asset management solutions.



# TTU-2830™ Technical Specifications

## Cellular/Network

<b>North American Variant I</b>	
LTE Cat 1	1900 (B2)/AWS 1700 (B4)/850 (B5)/700 (B12) MHz
HSPA/UMTS	850 (V)/1900 (II) MHz
<b>North American Variant II</b>	
LTE Cat 1	AWS 1700 (B4)/700 (B13) MHz
<b>Global Variant I</b>	
HSPA/UMTS	800 (VI)/850 (V)/900 (VIII)/1800 (III)/1900 (II) MHz
GSM/GPRS	850/900/1800/1900 MHz
<b>Global Variant II</b>	
GSM/GPRS	850/900/1800/1900 MHz

## Data Support

SMS, UDP Packet Data, TCP, CalAmp Telematics Cloud API

## Satellite Location (GNSS)

Constellation Support	Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS)
Channels	55 Channel
Tracking Sensitivity	-167 dBm
Acquisition Sensitivity	-156 dBm (hot start) -148 dBm (cold start)
Location Accuracy	~2.0m CEP Open Sky (SBAS 24 hours static)
Location Update Rate	Up to 4 Hz
Anti-jamming	
AGPS Location assistance capable	

## Comprehensive I/O

Ignition Inputs	1 fixed bias
Digital Inputs	2 (high/low bias selectable 0-30 VDC)
Digital Outputs	3 (open collector relay 150mA)
Analog Inputs	1 external ADC input
Accelerometer	Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection)
Serial Interface	1 TTL port
1-Wire® Interface	1 (driver ID/temperature sense)
Status LEDs	2 (GPS and cellular)

## Certifications

Industry Certifications FCC, IC, PTCRB, RoHS

## Electrical

Operating Voltage	12/24 VDC Vehicle Systems 9-30 VDC (start-up, operating) 7-32 VDC (momentary)
Power Consumption	Typical 400uA @ 12V (deep sleep) Typical 15mA @ 12V (radio-active sleep) Typical 60mA @ 12V (active tracking w/GPS and cell enabled)

## Battery Pack

Battery Capacity	Up to 5200 mAh
Battery Technology	Lithium-Ion
Charging Temperature	0° to +45° C

## Environmental

Temperature	-30° to +60° C (connected to primary power) -20° to +60° C (operating on internal battery) -20° to +25° C (storage > 3 months)
Humidity	95% RH @ 50° C non-condensing
Shock and Vibration	U.S. Military Standards 202G, SAEJ1455
ESD	SAE J1113-13 (4 KV Limit)
Ingress Protection Rating	IP66

## Physical/Design

Dimensions	4.5 x 3.2 x 1.6" (114 x 80 x 39mm)
Weight	8.11 oz. (230g)

## Connectors/SIM Access

Power, I/O	12 wire captive harness
SIM Access	Internal (2FF SIM)

## Device Management

PULS™	Monitor, manage, upgrade firmware, configure and troubleshoot devices remotely
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## Embedded Intelligence Engine

PEG™	Update device functionality or develop new on the edge applications
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## CALIFORNIA PROPOSITION 65



### WARNING:

This product can expose you to chemicals including Carbon black and Nickel, which are known to the State of California to cause cancer, and including Bisphenol A and 1,3-Butadiene, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)