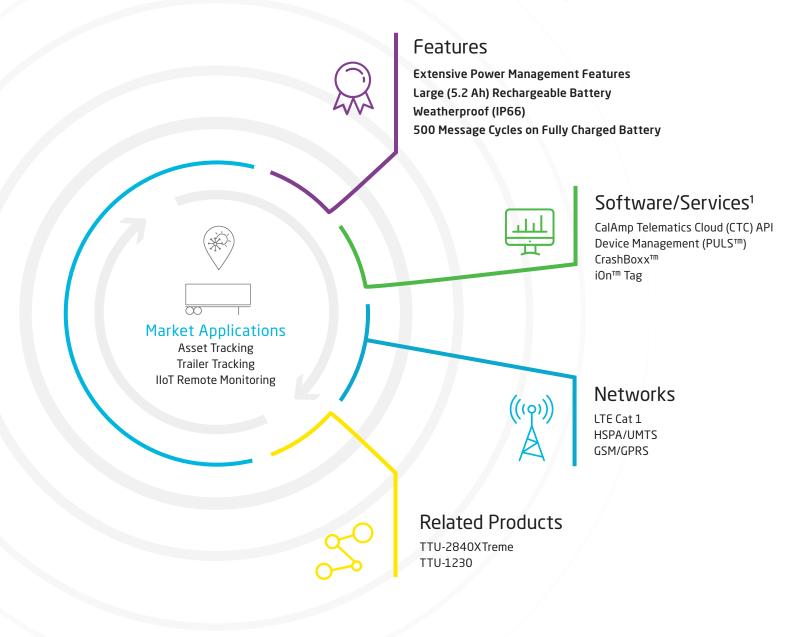
TTU-2830™



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.





Cal/Amp[®]

TTU-2830™ Technical Specifications

Cellular/Network

 North American Variant I

 LTE Cat 1
 1900 (B2)/AWS 1700 (B4)/850 (B5)/700 (B12) MHz

 HSPA/UMTS
 850 (V)/1900 (II) MHz

 North American Variant II
 AWS 1700 (B4)/700 (B13) MHz

LIE Cal 1 AW 3 1/00 (B4)//00 (B13) I

Global Variant I

HSPA/UMTS 800 (VI)/850 (V)/900 (VIII)/1800 (III)/1900 (II) MHz

GSM/GPRS 850/900/1800/1900 MHz

Global Variant II

GSM/GPRS 850/900/1800/1900 MHz

Data Support

SMS, UDP Packet Data, TCP

Satellite Location (GNSS)

Constellation SupportHybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS)Channels55 ChannelTracking Sensitivity-167 dBmAcquisition Sensitivity-156 dBm (hot start)
-148 dBm (cold start)Location Accuracy~2.0m CEP Open Sky (SBAS 24 hours static)Location Update RateUp to 4 HzAnti-jammingAGPS 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)

Cloud/Software Services¹

PULS™	Monitor, manage, upgrade firmware, configure and troubleshoot devices remotely
CTC	Device data stream via RESTful APIs

Edge Intelligence¹

PEG™ Update device functionality or develop new on the edge applications.



¹ Subscription service enabled. Contact sales rep for additional details.