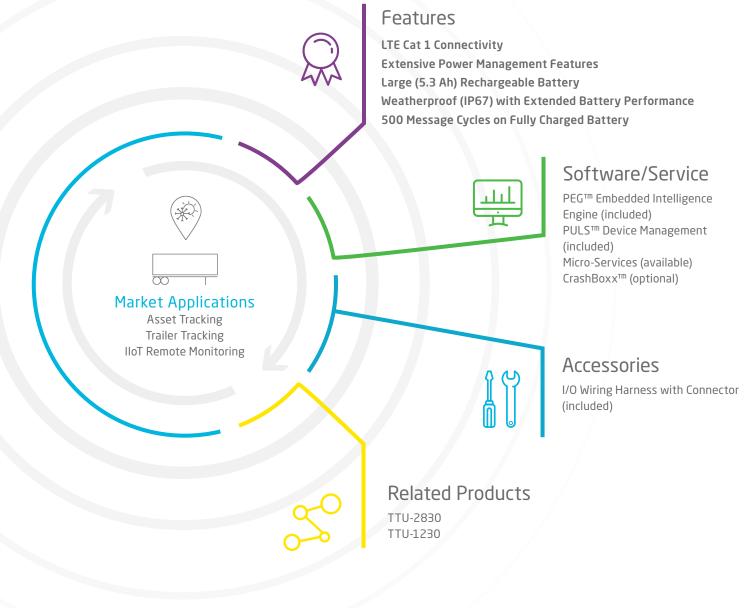
TTU-2840XTreme[™]



Extended Durability Asset Tracker Built for Extreme Weather Climates and Excellent Field Reliability

The TTU-2840XTreme[™] is a complete asset and trailer tracking device with a rechargeable battery and an extended temperature charging range, providing an ideal solution for assets that are tethered or may sit disconnected for periods of time. PEG's powerful engine, precise GPS technology and LTE Cat 1 delivers intelligence to enable today and tomorrow's asset management solutions.



Cal/Amp[®]

CalAmp

Irvine, CA 92618

888.3CALAMP

calamp.com

15635 Alton Pkwy Ste 250

TTU-2840XTreme[™] 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 | |
| LTE Cat 1 | AWS 1700 (B4)/700 (B13) 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

Device Management

PULS™

Monitor, manage, upgrade firmware, configure and troubleshoot devices remotely

Embedded Intelligence Engine

PEG™

Update device functionality or develop new on the edge applications

Electrical

| Operating Voltage | 12/24 VDC Vehicle Systems |
|-------------------|---|
| | 9-32 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 5300 mAh |
|----------------------|---|
| Battery Technology | Lithium-Ion |
| Charging Temperature | -15° to +55° C (extended temperature range) |

Environmental

| Temperature | -30° to +60° C (connected to primary power) |
|---------------------------|--|
| | -20° to +60° C (operating on internal battery) |
| | -20° to +35° 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 | IP67 |

Physical/Design

| Dimensions | 5.4 x 3.1 x 2.0" (137 x 80 x 52mm) |
|------------|------------------------------------|
| Weight | 12.06 oz. (342g) |

Connectors/SIM Access

| Power, I/O | 12 wire connector with detachable harness |
|------------|---|
| SIM Access | Internal (2FF SIM) |

Product Options

Customized hardware and software development