

TTU-2830M™

Weatherproof LTE CAT M1 asset tracker with 12-wire harness

The TTU-2830M is a weatherproof LTE CAT M1 tracker designed for long-term deployment on powered assets that may remain disconnected for extended periods. Global cellular coverage, Bluetooth Low Energy 5.0, a large rechargeable battery, expansive I/O, and CalAmp edge intelligence provide flexible asset management.

Cal/Amp®



DIMENSIONS

114 × 80 × 39 mm
(4.49 × 3.15 × 1.54 in)



WEIGHT

580 g
(20.5 oz)

Highlights



Global LTE CAT M1 connectivity with GSM and GPRS fallback



Rechargeable 5.2 Ah battery supports up to 500 message cycles



Triple-axis motion sensor detects movement, impact, and tilt



Bluetooth Low Energy 5.0 supports peripheral integration



12-wire harness provides digital, analog, serial, and 1-Wire I/O



IP66 enclosure and CalAmp edge intelligence support rugged deployments

PHYSICAL DESIGN

Dimensions 114 × 80 × 39 mm
(4.49 × 3.15 × 1.54 in)

Weight 580 g (20.5 oz)

CELLULAR

LTE CAT M1 Bands B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B28, B39

2G Bands B2, B3, B5, B8

Data Support SMS, UDP Packet Data, TCP

GNSS

Constellation Support GPS, GLONASS, SBAS (WAAS, EGNOS, MSAS)

GNSS 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

A-GPS Assistance Yes

Anti-Jamming Detection Yes

WIRELESS INTERFACES

Bluetooth Bluetooth 5.0

ANTENNAS & SIM

Cellular Antenna Internal

GPS Antenna Internal

SIM Access Internal (2FF SIM)

POWER

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 Capacity Up to 5200 mAh

Battery Technology Lithium-ion (Li-ion)

Battery Life 500 message cycles on a fully charged battery

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 85% RH @ 50° C non-condensing

Shock & Vibration MIL-STD-202G, SAE J1455

ESD IEC 61000-4-2, 4 kV

Environmental Rating IP66

SENSORS

Motion Sensor 3-axis accelerometer

I/O

Power / I/O Connector 12 wire captive harness

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

DC Power Outputs 1 switched VIN*

1-Wire Interface 1 (driver ID/temperature sense)

Status LEDs 2 (GPS and cellular)

EDGE INTELLIGENCE

Firmware 32-Bit

Edge Programming PEG

CLOUD / SOFTWARE SERVICES

Device Management Manage, configure, and deploy OTA software updates to connected assets at scale

CalAmp Telematics Cloud Stream telematics data into proprietary systems with flexible API integration

CalAmp App Fleet and asset management software for tracking, monitoring, and managing vehicles, equipment, drivers, assets, and cargo.

CERTIFICATIONS

Certifications FCC, IC, CE, PTCRB, RoHS, BT SIG, RCM

ACCESSORIES

Accessories [View accessories on CalAmp.com](https://calamp.com/accessories)