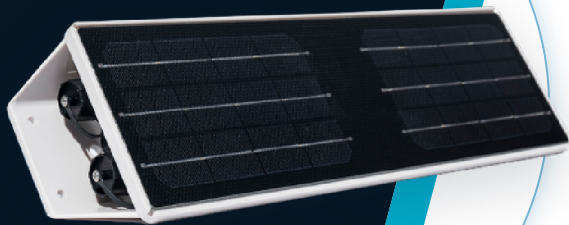


TTU-2900MB™

Solar-powered LTE CAT M1 gateway for rugged asset tracking

The TTU-2900MB is a solar-regenerative LTE CAT M1 telematics gateway built for extreme environments. Its IP67 enclosure, 6.2 Ah battery, Bluetooth Low Energy, wired sensor interfaces, and CalAmp cloud and device management support asset utilization, safety, security, and efficient operations.



Cal/Amp®



DIMENSIONS

463 × 128 × 48 mm
(18.23 × 5.04 × 1.89 in)



WEIGHT

1,084 g
(38.2 oz)

Highlights



LTE CAT M1 connectivity with 2G support



IP67-rated enclosure supports rugged, weatherproof deployments



Multiple digital, analog, 1-Wire, TTL, and RS-232 interfaces



Solar power and a 6.2 Ah lithium-ion battery extend operation



Bluetooth Low Energy and VBUS support wireless and vehicle sensors



CalAmp Telematics Cloud and PULS support remote management

PHYSICAL DESIGN

Dimensions 463 × 128 × 48 mm
(18.23 × 5.04 × 1.89 in)

Weight 1,084 g (38.2 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, TCP

GNSS

Constellation Support GPS, GLONASS, Galileo, BeiDou, QZSS

GNSS Channels 55 Channel

Tracking Sensitivity -157 dBm

Acquisition Sensitivity -157 dBm (hot start)
-146 dBm (cold start)

Location Accuracy <2.5m CEP Open Sky

Location Update Rate Up to 5 Hz

WIRELESS INTERFACES

Bluetooth BLE

VEHICLE BUS

Vehicle Connector NEED TO CHECK WITH ENGINEERING Type

Heavy-Duty Protocols CAN (J1939), TrailerCAN

ANTENNAS & SIM

Cellular Antenna Internal

GPS Antenna Internal

SIM Access External

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 with GPS and cell enabled)

Battery Capacity 6.2 Ah

Battery Technology Lithium-ion (Li-ion)

Charging Temperature -10° to +50° C

ENVIRONMENTAL

Temperature -30° to +60° C (connected to primary power)
-20° to +60° C (operating on internal battery)
-30° to +45° C ≤ 6 months (long term storage with battery)

Humidity 75% RH @ 50° C non-condensing

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

ESD IEC 61000-4-2, 4 kV

Environmental Rating IP67

SENSORS

Motion Sensor 3-axis accelerometer

I/O

Power / I/O Connector 1x 12-Pin round connector, 1x 14-Pin round connector

Ignition Inputs 1 (fixed bias)

Digital Inputs 3 (high/low bias selectable 0-30 VDC)

Digital Outputs 2 (open collector relay 150mA)

Analog Inputs 2 external ADC inputs

DC Power Outputs 1 switched VCC_SYS (3.5V – 4.2V), 1 switched 3.3V

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

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, PTCRB, RoHS

ACCESSORIES

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