TTU-1200™ GPRS/CDMA/HSPA Series

6 month rechargeable Trailer Tracking Unit

EXPERIENCE THE ADVANTAGE

• 500 message cycles on fully charged battery pack

• 18 months with 0 messages until a final 30 min tracking session

• 6 months with single message cycle per day on fully charged battery pack

• Superior cellular and GPS quality

• IP66 sealed enclosure

• Built-in 3-axis accelerometer for motion sensing

• Built-in cellular and GPS antenna for easy installation

The TTU-1200 rechargeable battery pack trailer tracking product is designed for reliable, multi-year deployments. The TTU-1200 is an ideal solution for managing assets that are normally tethered to 12 or 24 volt systems but may sit idle for extended periods.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The TTU-1200 high-value tracking unit from CalAmp features a small size, superior GPS performance, an internal 3.8 Ah battery and three Inputs/Outputs (I/O). The TTU-1200 is a complete vehicle tracking and communications device incorporating next-generation, super-sensitive GPS technology on GPRS, CDMA and HSPA cellular networks for installation in any 12 or 24 volt mobile vehicle. Superior internal antennas for both cellular and GPS eliminate the need for wired antennas and make the TTU-1200 mountable virtually anywhere in the vehicle for easy, inexpensive installations. Messages are transported across the cellular network using enhanced SMS or UDP messaging providing a reliable communications link between the device and your application servers. The TTU-1200 is designed to dramatically reduce cost of ownership, power and size while providing excellent field reliability.

FLEXIBILITY

The TTU-1200 employs CalAmp's industry leading on-board alert engine, PEG™ (Programmable Event Generator). This advanced engine monitors external conditions and supports customer-defined exception-based rules to help meet the needs of your application. PEG continuously monitors the vehicle environment and responds instantaneously to pre-defined threshold conditions related to time, date, motion, location, geo-zone, input and other event combinations. With PEG, your unique application will meet demanding customer requirements. This behavior can be programmed by CalAmp before shipment, at a customer's facility, or over-the-air once the unit has been fielded.

OVER-THE-AIR SERVICEABILITY

The TTU-1200 also leverages CalAmp's industry leading over-the-air device management and maintenance system, PULS™ (Programming, Updates, and Logistics System). Configuration parameters, PEG rules, and firmware can all be updated over the air. PULS offers out-of-the-box hands free configuration and automatic post-installation upgrades. You can also monitor unit health status across your customers' fleets to quickly identify issues before they become expensive problems.

TTU-1200 SPECIFICATIONS

GENERAL

Communication Modes	GPRS/EDGE/HSPA and CDMA 1xRTT packet data, UDP and SMS
Location Technology	50 channel GPS
Operating Voltage	12 and 24 volt vehicle systems

GPS

Location Technology	50 channel GPS (with SBAS)
Location Accuracy	SBAS: WAAS, EGNOS, MSAS, GAGAN
Tracking Sensitivity	2.0 meter CEP (with SBAS)
Acquisition Sensitivity	-162dBm
AGPS Capable	-147dBm

BATTERY PACK

Battery Capacity	3.8 amp hour
Battery Voltage	3.6 volts
Battery Charge Time	6 hours
Battery Technology	Lithium ion

CELLULAR

Data Support	
Operating Bands (MHz)	SMS, GPRS, CDMA 1xRTT or HSPA packet data
GSM/GPRS	850/900/1800/1900
CDMA/1XRTT	850/1800
HSPA/UMTS	800(VI)/850(V)/900(VIII)/1700(IV)/1900(II)/2100(I)
Transmitter Power	
GSM/GPRS	850/900
	1800/1900
CDMA/1XRTT	850
	1800
HSPA/UMTS	(all bands)
HSPA data rates	5.6 Mbps upload/7.2 Mbps download
HSPA Fallback	EDGE/GPRS/GSM quad band
	EDGE MCS1-MCS9
	3GPP Release 6

COMPREHENSIVE I/O

Digital Inputs	3 fixed bias
Digital Outputs	3 open collector (150mA)
Status LEDs	GPS and cellular

CERTIFICATIONS

Fully certified FCC, CE, IC, PTCRB, Applicable Carriers

ENVIRONMENTAL

Temperature	-30º to +75º C (operating)
	-40º to +85º C (storage)
Humidity	95%RH @ 50º C non-condensing
Shock and Vibration	U.S. Military Standards 202G and 810F, SAE J1455
EMC/EMI	SAE J1113; FCC–Part 15B; Industry Canada
RoHS Compliant	

ELECTRICAL

Operating Voltage	6-32 VDC
Power Consumption	2 mA @ 12V (deep sleep)
	10 mA @ 12V (sleep on network)
	70 mA @ 12V (active standby)

PHYSICAL

Dimensions	2.125" x 4.33" x 1.59", (54 x 110 x 40.4mm)
Weight	8 oz, (226g)

CONNECTORS, SIM ACCESS

SIM Access	Internal

MOUNTING

Standard tie-wrap or adhesive
Screw mount bracket

KEY FEATURES

- 6 months with single message cycle per day on fully charged batteries
- 3.8 Ah lithium ion re-chargeable battery pack
- IP66 sealed enclosure
- Packet data (GPRS, CDMA 1xRTT, or HSPA) and SMS-based messagingGPRS
- Internal GSM and GPS aAntennas
- Super sensitive GPS (-162 dBm tracking)
- Ultra-low power safe mode (<2mA)
- 3 axis accelerometer for motion sensing
- 3 inputs and 3 outputs
- Voltage monitoring and low battery notification
- 20,000 buffered messages
- 4 Built-in Geo-fences
- PEG™ Exception-Based Rules
- Automatic, Over-The-Air Unit configuration on Power-up (PULS™)
- Over-The-Air Firmware Download (PULS™)
- Web-Based Device Management (PULS™)

DEVELOPMENT SUPPORT OPTIONS

- Customized hardware and software development available on request