LMU-1100™ GPRS

WATER RESISTANT GPS TRACKING UNIT

The LMU-1100 is an economical, fully-sealed vehicle tracking product designed for easy and reliable installation in recreational vehicles and assets with outdoor exposure. The LMU-1100 is an ideal solution for asset monitoring and theft recovery for motorcycles, snowmobiles and other outdoor recreational vehicles.

Competitive Price, Competitive Technology, Competitive Edge

The LMU-1100 high-value tracking unit from CalAmp features a small size, superior GPS performance, an internal 700 mAh back-up battery and more Inputs/Outputs (I/O). The LMU-1100 is a complete vehicle tracking and communications device incorporating next-generation, super-sensitive GPS technology on GSM/GPRS 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 LMU-1100 mountable virtually anywhere in the vehicle for easy, inexpensive installations. Messages are transported across the GSM/GPRS network using enhanced SMS or UDP messaging providing a reliable communications link between the device and your application servers. The LMU-1100 is designed to dramatically reduce cost, power and size while providing excellent field reliability.

Flexibility

The LMU-1100 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 LMU-1100 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.

Experience *The Advantage*

- Economical device
- Water resistant
- Built in back-up battery
- Built in 3-axis motion sense and tilt alerting
- Built-in cellular and GPS antenna for easy installation
- Input/output configuration to support up to 2 input, 1output, 1-wire® interface for temperature sensors
- Superior GPS & cellular quality
- Low power sleep modes
- Over-the-air update capability for configuration and firmware

LMU-1100 Specifications

General Specifications

Communication Modes	GPRS packet data and SMS
Location Technology	50-channel GPS (with WAAS)
Operating Voltage	12 and 24 volt vehicle systems

GPS Specifications

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

Cellular Specifications

Data Support	SMS, GPRS (UDP)
Cellular/PCS:	FCC– Parts 22, 24; PTCRB
GPRS	Up to class 12
Quad-Band	850/900/1800/1900 MHz
Output Power	850 (Class 4) 2W 900 (Class 4) 2W 1800 (Class 1) 1W 1900 (Class 1) 1W

Comprehensive I/O

Inputs	2
Outputs	1 relay driver (150 mA)
1-Wire® Interface	1
Status LEDs	GPS and cellular

Certifications

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

Environmental Specifications

Temperature	-30° to +75° C (operating) -40° to +85° C (storage)
Humidity	95%RH @ 50° 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 Specifications

Operating Voltage	6-32 VDC
Power Consumption	1 mA @ 12V (deep sleep) 10 mA @ 12V (sleep on network) 70 mA @ 12V (active standby)

Physical Specifications

Dimensions	2.5 x 3.125 x 0.875”, (63.5 x 80 x 23mm)
Weight	3 oz, (85 g) (internal)

Connectors, SIM Access

SIM Access	Internal
Connection Type	Molded power and I/O harness

Mounting

Standard tie-wrap or screw mount

Key Features

- GPRS UDP and SMS messaging
- Water resistant
- Internal cellular and GPS antennas
- Super sensitive GPS (-162 dBm)
- Internal back-up 700mAh battery
- Ultra-low power sleep mode (<1mA)
- 3-axis accelerometer for motion sense and tilt
- Voltage monitoring and low battery notification
- 2,000 buffered messages
- 10 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™)

Optional Features/Functions

- Temperature sensing via 1-wire protocol
- Serial cable

Development Support Options

- Customized hardware and software development available on request

Air Superiority™

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