

LMU-5000™ LTE/HSPA/EVDO Series

Enterprise 3G Linux Cellular Broadband Router, Gateway and Location Messaging Unit



EXPERIENCE THE ADVANTAGE

- Superior 3G cellular and GPS wireless performance
- ARM9 400MHz low power embedded processor
- · Linux 3 OpenWrt operating system
- IP router and more
- Built-in 3-axis accelerometer for driver behavior, motion, and impact sensing
- Advanced peripherals
- Comprehensive I/O system
- 10/100 Ethernet interface
- Host and client USB
- · Switched power serial ports

CalAmp's LMU-5000 has the versatility, speed, and expandability to meet customers' ever challenging needs in fixed or mobile broadband applications. With a powerful, lower power, 400MHz ARM9 embedded processor, the LMU-5000 boasts an adaptable platform featuring: 3G broadband routing, cellular gateway functions, a programmable event generation engine, built-in 3-axis g-force measurements, multiple power management sleep modes, leading GPS sensitivity tracking technologies, and multiple interfaces all brought together under a flexible Linux operating system.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-5000 comes equipped with an Ethernet 10/100 port, both host and device USB ports, RS232 serial port, switched power TTL serial port, two 1-Wire® busses, seven inputs seven outputs, and four A/D inputs. The LMU-5000 also supports advanced peripherals including laptops, USB dongles, mobile data terminals (MDT's), RFID tags and more.

FLEXIBILITY

The LMU-5000 software environment employs CalAmp's industry leading on-board alert engine, PEG™ (Programmable Event Generator). PEG™ monitors external conditions and supports customer-defined exception-based rules. PEG™ continuously monitors the environment and responds instantaneously to pre-defined threshold conditions related to time, date, motion, location, geo-zone, input and other event combinations.

OVER-THE-AIR SERVICEABILITY

The LMU-5000 also incorporates CalAmp's over-the-air device management and maintenance software, PULS™ (Programming, Updates and Logistics System). Linux applications, configuration parameters, PEG™ scripts, and firmware can all be updated over-the-air. You can also monitor unit health status across your installations to quickly identify issues before they become expensive problems.

All of these capabilities packed into a small device are a competitive package second to none, designed to lower the cost of delivering, supporting, and growing countless broadband applications.



LMU-5000 SPECIFICATIONS

PROCESSOR

Processor ARM Cortex A9 32bit MCU

Speed 400 MHz Flash Up to 128MB

RAM Up to 64MB @ 133MHz bus speed

Real Time Clock

OPERATING SYSTEM, SOFTWARE INTERFACE, SECURITY

Operating System Linux OpenWrt 3.3

Application Interfaces TCP/IP, UDP/IP, DHCP, HTTP, IP Router, PPP,

HTTP Web server, Telnet DHCP server, DDNS, DDNS Client, NAT, NMEA, TAIP, TSIP,

GPS, TFTP, IP port forwarding

Security VPN (SSL v2, TLS v1) SSH server, SCP, SFTP

GPS

Location Technology GPS with SBAS, DGPS

Receiver Type 50 channels
Tracking Sensitivity -162 dBm
Acquisition Sensitivity -148 dBm
Location Accuracy 2.0m

AGPS Capable

CELLULAR

LTE 700/800/900/2100/2600 MHz (depending

on configuration)

Downlink up to 100 Mbps (peak burst rate) Uplink up to 50 Mbps (peak burst rate) Fallback to HSPA/CDMA (depending on

configuration)

HSPA Tri-Band 850/1900/1200 MHz diversity capability

Downlink up to 7.2 Mbps Uplink up to 5.76 Mbps

Fallback to HSDPA/UMTS/EDGE/

GPRS/2.4GHz

EVDO Rev A Dual-Band 800/1900MHz diversity capability

Downlink up to 3.1Mbps Uplink up to 1.8Mbps

Fallback to CDMA 1X Rev 0 CDMA 1xRTT

DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

CERTIFICATIONS

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

About CalAmp

CalAmp Corp. (NASDAQ: CAMP) is a proven leader in providing wireless communications solutions to a broad array of vertical market applications and customers. CalAmp's extensive portfolio of intelligent communications devices streamline otherwise complex machine-to-machine (M2M) deployments. These solutions enable customers to optimize their operations by collecting, monitoring and efficiently reporting business critical data and desired intelligence from high-value remote assets. For more information, please visit www.calamp.com.

COMPREHENSIVE I/O

Digital Inputs 7 (high/low selectable 0-30 VDC)
Digital Outputs 5 relay driver outputs (200mA)
2 low current LED outputs (20mA)

Voltage A/D input 4 ± 0.1 V accuracy and voltage range 0-30VDC

1-Wire® Interface 2 (driver ID, Temperature sense) Status LEDs Power, COMM, GPS, Wi-Fi, and BT

ENVIRONMENTAL

Temperature -30° to $+70^{\circ}$ C (connected to primary power)

-40° to + 85° C (storage)

Humidity 95% R.H. @ 50° C non-condensing Shock and Vibration U.S. Military Standard 202G and 801G,

SAE J1455

EMC/EMI SAE J1113

ELECTRICAL

Operating Voltage 7-32 VDC (momentary)

9-30 VDC (start-up, operating)

Power Consumption 13mA (deep sleep)

161mA (SMS+UDP connection, GPS off)

270mA (continuous transmit) 2A (peak transmitting)

Back Up Battery Lithium-lon 3.7 V 1000mAH

(See online technical specifications for latest

details regarding battery)

PHYSICAL

Dimensions 5.2 x 2.7 x 1.2" (131 x 67 x 29mm)

Weight 5.4.0 oz, (153g)

CONNECTORS, SIM ACCESS

SIM Access Slot Access

Cellular SMA main, SMA diversity

External GPS SMA (with tamper monitoring, 3.0v)

External WiFi SMA RP

Ethernet 10/100 Base-T RJ45

USB On-The-Go (mini), Host Type A

Serial 1 DB-9 (RS232/RS485),

1 5-Pin Molex TTL level switch power

4-Pin Molex Power, ignition, ADC 22-Pin Molex I/O connections

MOUNTING

Screw mounting bracket Tie-wrap or adhesive

OPTIONAL ACCESSORIES

All necessary antennas (GPS, cellular, combined GPS/cellular)
Serial adapter cable RS-232 8-wire (PPP, AT commands, NMEA GPS output)

External jPOD™ truck ECU interface Connectorized I/O wiring harnesses

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All specifications are typical and subject to change without notice

