



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
- ARM 9 400MHz low power embedded processor
- Linux 3 operating system
- IP router and more
- Built-in 3-axis accelerometer for driver behavior, motion and impact sensing
- Advanced peripherals support
- 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, switch 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 (MDTs), RFID tags, and more.

FLEXIBILITY

The LMU-5000 software environment also employs CalAmp's industry leading on-board alert engine, PEG™ (Programmable Event Generator). The advanced PEG engine 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, Update 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 size 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	ARM9 32bit MCU
Speed	400 MHz
Flash	128M Bytes
RAM	64M Bytes @ 133 MHz bus speed
Real Time Clock	

OPERATING SYSTEM, SOFTWARE INTERFACE, SECURITY

Operating System	Linux 3.3 WRT
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	50-channel GPS with SBAS, DGPS
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-162dBm
Acquisition Sensitivity	-147dBm
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	850/1900/2100 MHz diversity capability Downlink up to 7.2 Mbps Uplink up to 5.76 Mbps Fallback to HSDPA/UMTS/EDGE/GPRS
EVDO Rev A Dual-Band	800/1900 MHz diversity capability Downlink up to 3.1 Mbps Uplink up to 1.8 Mbps Fallback to CDMA 1X Rev 0 and CDMA 1XRTT

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 \pm 0.1 V accuracy and voltage range 0-30 VDC
1-Wire® Interface	2 (driver ID, temperature sense)
Status LEDs	Status, COMM, and GPS

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, robust and scalable cloud service platform, and targeted software applications 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.

ENVIRONMENTAL

Temperature	-30° to +70° C (operating) -40° to +85° C (storage)
Humidity	95% R.H. @ 50° C non-condensing
Shock and Vibration	U.S. Military Standard 202G and 810G, SAE J1455
EMC/EMI	SAE J1113

ELECTRICAL

Operating Voltage	7- 32 VDC (running), 9-30 VDC (starting)
Power Consumption	15 mA (sleep) 160 mA (operating w/o GPS) 170 mA (operating w/GPS) 2A (peak transmitting)

PHYSICAL

Dimensions	5.2 x 2.7 x 1.2", (131 x 67 x 29mm)
Weight	5.4 oz, (153 g)

CONNECTORS, SIM ACCESS

SIM Access	Slot access
Cellular	SMA main, SMA diversity
External GPS	SMA (with tamper monitoring, 3.0v)
Ethernet	10/100 Base-T RJ45
USB	Host (standard), device (mini)
Serial	DB-9 (RS232), 5-Pin Molex (switch power TTL levels)
4-Pin Molex	Power, ignition, I/O
22-Pin Molex	I/O connections

CERTIFICATIONS

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

MOUNTING

Tie-wrap or adhesive
Screw mounting bracket

OPTIONAL FEATURES/FUNCTIONS

- All necessary antennas (GPS, cellular, combined GPS/cellular)
- Serial adapter cable RS-232 8-wire (PPP, AT commands, NMEA GPS output)
- jPOD adapter
- Connectorized I/O wiring harnesses

DEVELOPMENT SUPPORT OPTIONS

- Customized hardware and software development available on request

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All specifications are typical and subject to change without notice

