LMU-5530™ LTE/HSPA Series

3G/4G Broadband Router / Tracker

EXPERIENCE THE ADVANTAGE

- Superior 3G/4G cellular and GPS wireless performance

- ARM Cortex A9 800MHz low power embedded processor

- Linux OpenWrt 3.10 operating system

- Secure IP router functionality

- Bluetooth 4.0 Dual Mode

- 802.11 b/g/n/i Wi-Fi

- Built-in 3-axis accelerometer for driver behavior, motion and impact sensing

- 10/100 Ethernet interface

- USB Host + OTG

- Switched power serial ports

- Advanced peripherals support

- Full Featured Asset Tracker/Manager

- Comprehensive I/O system

- Over-the-air configuration and firmware download

- Internal Backup Battery

CalAmp's LMU-5530 has the versatility, speed and expandability to meet customers' ever challenging needs in fixed or mobile broadband applications. With a powerful, lower power, 800MHz ARM9 embedded processor, the LMU-5530 boasts an adaptable platform featuring: 3G/4G 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-5530 comes equipped with two Ethernet 10/100 ports, both host and device OTG USB, RS232/RS485 serial port, switched power TTL serial port, two 1-wire busses, seven inputs, seven outputs, and five A/D inputs. The LMU-5530 also supports advanced peripherals including laptops, USB dongles, Mobile Data Terminals (MDT's), RFID tags, and more.

FLEXIBILITY

In addition to the flexibility of the Linux operating system, the LMU-5530 software environment employs CalAmp's industry leading on-board alert engine, PEG™ (Programmable Event Generator). The Linux and PEG™ environments enable users to create and deploy their own custom applications. The advanced PEG engine monitors external conditions and supports customer-defined exception-based rules PEG continuously monitors the environments 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-5530 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. Unit health status can also be monitored 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 reduce the cost of delivering, supporting, and growing countless broadband applications.

LMU-5530 SPECIFICATIONS

PROCESSOR

Processor	ARM Cortex A9 32bit MCU
Speed	800 MHz
Flash	Up to 512MB
RAM	Up to 512MB
Real Time Clock	

OPERATING SYSTEM, SOFTWARE INTERFACE, SECURITY

Operating System	Linux OpenWrt 3.10
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	IPSEC, VPN (SSL v2, TLS v1) SSH server, SCP, SFTP

GPS

Location Technology	GPS; GLONASS, and QZSS capable
Enhancement Technology	SBAS: WASS, EGNOS, MSAS
Reciever Type	56 channels
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-148 dBm
Location Accuracy	2.0m
Location Update Rate	up to 10 Hz
Anti-jamming	
AGPS / Location assistance 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

LOCAL AREA NETWORKING

Bluetooth	4.0 Dual Mode
	Supports BLE
	Shared antenna with Wi-Fi
Wi-Fi	802.11 b/g/n/i
	Supports access point and/or client operations
	Supports internal/external antenna

DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

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	5 general purpose A/D (0-30 VDC)
1-Wire® Interface	2 (driver ID, Temperature sense)
Status LEDs	Power, COMM, GPS, Wi-Fi, and BT

ENVIRONMENTAL

Temperature	-30° to + 70° 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	8-32 VDC (running), 9-30 VDC (starting)
Power Consumption	Typical <2mA @ 12V (deep sleep)
	Typical 160mA @ 12V (SMS+UDP connections, GPS off)
	Typical 270mA @ 12V (continuous transmit)
Back Up Battery	Lithium-Ion 3.7 V 1000mAH (See online technical specifications for latest details regarding battery)

PHYSICAL

Dimensions	5.75 x 4.0 x 1.2" (146 x 102 x 40mm)
Weight	8.0 oz, (227g)

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	2x 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

CERTIFICATIONS

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

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