LMU-4200 GPRS/CDMA/HSPA Series

Enterprise Location Messaging Unit

EXPERIENCE THE ADVANTAGE

- GSM/GPRS, CDMA, 1xRTT, or HSPA configurations

- Dual reporting 20,000 buffered message log

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

- High sensitivity GPS

- 32 Built-in geo-fences, plus any combination of circle or polygon zones, up to 5400 points

- Garmin®, MDT, and other advanced peripherals support

- Power management sleep modes

- Comprehensive I/O

- Switched power serial ports

- 7 inputs, 5 outputs, 4 A/D Inputs

- Over-the-air configuration and firmware download

ThinAir's LMU-4200 product has the features, expandability, and flexibility with the intelligence to meet all customer's ever changing needs in fleet management. The LMU-4200 offers a full set of features, comprehensive I/O system and expandable accessories that make it an industry leading value proposition. The LMU-4200 expandability and flexibility lowers the cost of delivering, supporting, and growing fleet management solutions.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-4200 is designed to support customers needing an array of vehicle interfaces. For example, the serial port supply switchable power at selectable voltages to ease the installation of peripheral data devices. The optional ECU (Engine Control Unit) interface reads and transmits heavy-duty engine condition and performance data such as engine temperature along with the fault codes to provide the best possible real-time picture of vehicle health.

FLEXIBILITY

The LMU-4200 employs ThinAir's industry leading alert engine. This advanced engine monitors external conditions and supports customer-defined exception-based rules to help meet the needs of your application.

The alert engine 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 this engine, your unique application will meet demanding customer requirements. This behavior can be programmed by ThinAir before shipment, at a customer's facility, or over-the-air once the unit has been fielded.

OVER-THE-AIR SERVICEABILITY

Configuration parameters, on-board alert engine rules, and firmware can all be updated over-the-air. ThinAir's over-the-air device 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.

LMU-4250 SPECIFICATIONS

GENERAL

Communication Modes	GPS
Location Technology	50 channel GPS (With SBAS)
Operating Voltage	12 and 24 volt vehicle systems

GPS

Location Technology	GPS
Enhancement Technology	SBAS: WAAS, EGNOS, MSAS, GAGAN
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-147 dBm
Location Accuracy	2.0m
Kick Start	3 seconds @ -130 dBm
AGPS capable	

CELLULAR

Data Support	SMS, GPRS, CDMA 1xRTT
	HSPA packet data
Operating Bands (MHz)	
GSM/GPRS	850/900/1800/1900
CDMA/1XRTT	850/1900
HSPA/UMTS	800(VI)/850(V)/900(VII)/
	1700(IV)/1900(II)/2100(I)
Transmitter Power	
GSM/GPRS	850/900 32.5 dBm
	1800/1900 29.3 dBm
	850 24 dBm
CDMA/1XRTT	1900 23 dBm
HSPA/UMTS	(all bands) 23 dBm
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 Ignition Inputs	1 fixed bias
Digital Inputs	7 (high/low selectable 0-30 VDC)
Digital Outputs	5 (open collector relay 150mA)
Current Limited Outputs	2 (20 mA)
A/D Inputs	4 (0-30 VDC, +/- 0.1 V accuracy)
1-Wire® Interface	2 (driver ID, temperature sensors)
Status LED's	GPS and Cellular

CERTIFICATIONS

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

DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

About ThinAir

ThinAir Telematics, based in Houston, Texas, is the premier provider of fleet management and GPS tracking solutions for any size business. Our solutions offer real-time insight into mobile and fixed assets to reduce operational costs and improve customer service, safety, and security. Our intuitive web-based and mobile applications empower users to quickly adopt and realize rapid ROI. For more information, please visit www.thinair.co

ENVIRONMENTAL

Temperature	-30° to +75° C (connected to primary power)
	-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

ELECTRICAL

Input Voltage	7-32 VDC (momentary)
	9-30 VDC (start-up, operating)
Power Consumption	4 mA @ 12V (deep sleep)
	10 mA @ 12V (sleep on network with SMS)
	20 mA @ 12V (sleep on network with GPRS)
	70 mA @ 12V (active tracking)
Back Up Battery	(Optional) Lithium-Ion 200 mAh or 1000 mAh

PHYSICAL

Dimensions	4.3" x 3.2" x 0.86", (110 x 81 x 22mm)
Weight	4 oz (113g)

CONNECTORS, SIM ACCESS

SIM Access	Internal
Cellular Ant	SMC (External)
GPS Ant	SMA with tamper monitoring
WiFi Option	3.0 V (External) RP-SMA
Vehicle Bus Option	DB-15
4-Pin Molex	Power, ground, ignition, A/D
Two 5-Pin Molex 22	Switched power serial
16-Pin Molex	Expansion port
Pin Molex	I/O connection

MOUNTING

Standard tie-wrap, adhesive, velcro, or screw mounting bracket

OPTIONAL FEATURES/FUNCTIONS

- External antennas (GPS, cellular, combined GPS/cellular)
- Serial adapter cable RS-232 8-wire (PPP, AT commands, NMEA GPS output)
- Dongle for truck ECU interface
- Connectorized I/O wiring harnesses
- Built-in or external battery batteries

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