



# Ward Track 4200 Series

Enterprise Location Messaging Unit Supports  
Customer-Defined, Exception-Based Rules



Ward's LMU-4200 series have the expandability, flexibility and intelligence to meet ever changing needs of fleet management. The LMU-4200 offers a full set of features, comprehensive I/O system and accessories to make it an exceptional value proposition. Designed to support an array of vehicle interfaces, the serial ports supply switchable power at selectable voltages to ease the installation of peripheral data devices.

## Flexibility

The LMU-4200 employs on-board alert engine, PEG™ (Programmable Event Generator) to monitor external conditions and supports customer-defined, exception-based rules. PEG continuously monitors 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, customized applications meet demanding requirements. Programmable before shipment, local facility, or wireless after installation.

## Wireless Serviceability

The LMU-4200 also leverages the device management and maintenance system, PULS™ (Programming, Updates, and Logistics System). Configuration parameters, PEG rules, and firmware can all be updated wireless. PULS also allows hands free configuration and automatic post-installation upgrades.

## Options

- ✓ External antennas (GPS, cellular, combined GPS/cellular)
- ✓ Serial adapter cable RS-232 8-wire
- ✓ Connective I/O wiring harnesses
- ✓ Backup batteries

## KEY FEATURES

- 32 built-in geo-fences, plus any combination of circle or polygon zones; up to 5400 points
- Built-in 3-axis accelerometer for driver behavior, motion sensing, hard braking, impact detection
- Web-based device management diagnostic tools
- Dual reporting 20,000 buffered message log
- GSM/GPRS, CDMA 1xRTT, or HSPA configurations
- Garmin®, MDT, and other advanced peripherals support
- Power sleep modes
- Comprehensive I/O system
- Switched power serial ports



California Environmental Protection Agency  
Air Resources Board



# Specifications - Ward Track 4200 Series

## General

Communication Modes:	GPRS/EDGE/HSPA and CDMA 1xRTT packet data, UDP and SMS
Location Technology	50 channel GPS
Operating Voltage	12 volt vehicle systems

## Electrical

Voltage	6-32 VDC
Consumption	4 mA @ 12 V (deep sleep) 10 mA @ 12 V (sleep on network with SMS) 20 mA @ 12 V (sleep on network with GPRS) 70 mA @ 12 V (active tracking)

## Connectors, SIM Access

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

## GPS

Location Technology	50 channel GPS (with SBAS); SBAS: WAAS, EGNOS, MSAS, GAGAN
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-147 dBm
Kick Start	3 sec @ -130 dBm
AGPS	Capability

## Cellular

Data Support	SMS, GPRS, CDMA 1xRTT or HSPA packet data
Operating Bands (MHz):	GSM/GPRS: 850/900/1800/1900 CDMA/1XRTT: 850/1800 HSPA/UMTS: 800(VI)/850(V)/900(VIII)/1700(IV)/1900(II)/2100(I)
Transmitter Power	GSM/GPRS: 850/900, 32.5 dBm 1800/1900, 29.3 dBm
CDMA/1XRTT:	850, 24 dBm 1800, 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 (20mA)
A/D Inputs	4 (0 - 30VDC, +/-0.1V accuracy)
1-Wire® Interface	Driver ID, temperature sense
Status LEDs	GPS and cellular

## Environmental

Temperature	-30° to +75° C <b>operating</b> ; -40° to +85° C <b>storage</b>
Humidity	95% R.H. @ 70° C non-condensing
Shock and Vibration	U.S. Military Standards 202G and 810F, SAE J1455
EMC/EMI	SAE J 1113; FCC-Part 15B; Industry Canada

## Physical

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

## Certifications

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



8801 Tradeway  
San Antonio, TX 78217  
210.824.7383 | 800.580.WARD  
info@ejward.com • www.ejward.com