



OS-250 NextG Series

GPS Tracking Unit with OBD-II Interface



Orbit Satellite
Vehicle Tracking Solution

EXPERIENCE THE ADVANTAGE

- Superior GPS & cellular performance
- OBD-II connector and interface to read vehicle bus data
- Built-in Accelerometer for driver behavior capabilities and impact detection
- Advanced crash detection
- Pre and Post Vehicle impact data capture capabilities
- Power sleep modes
- Backup battery
- Optional Bluetooth

The OS-250 is an economical, full-featured vehicle tracking product designed for easy and reliable installation in automobiles. The OS-250 is an ideal solution for automotive insurance, driver behavior management, auto rental and automotive applications when access to the vehicle diagnostics interface (OBD-II) is required.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The OS-250 full featured tracking unit from CalAmp features small size, superior GPS performance, OBD-II interface, backup battery, and a 3-axis accelerometer. These features enable the OS-250 to access vehicle diagnostic interface data, track vehicle speed and location, plus detect hard braking, cornering, acceleration and capture pre and post-impact data. Superior internal antennas for both cellular and GPS eliminate the need for professional installation and make the OS-250 install quick, easy and inexpensive. Messages are transported across the cellular network using enhanced SMS or UDP messaging providing a reliable communications link between the device and your application servers. The OS-250 is designed to dramatically reduce cost, power and size while significantly improving field reliability in 12 volt passenger or light-duty vehicles.

FLEXIBILITY

The OS-250 employs CalAmp's advanced industry leading on-board alert engine, PEG™ (Programmable Event Generator) to monitor external conditions and support customer-defined exception-based rules to meet your application requirements. PEG 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. This behavior can be programmed by CalAmp before shipment, at a customer's facility, or over-the-air once the unit has been fielded.

OVER-THE-AIR SERVICEABILITY

The OS-250 leverages CalAmp's management and maintenance system, PULS™ (Programming, Updates, and Logistics System), for over-the-air configuration parameters, PEG rules, and firmware. This out-of-the-box hands free configuration and automatic post-installation upgrades can monitor unit health status across your customers' fleets to identify issues before they become expensive problems.



OS-250 SPECIFICATIONS



GENERAL

Communication Modes	GPRS/EDGE/HSPA and CDMA 1xRTT packet data, UDP and SMS
Messages	20,000 buffered messages
Geofence	25 radial and 25 polygonal geofences onboard device, user defineable Automatic over air firmware and configuration updates via PULS

GPS

Location Technology	50 channel GPS (with SBAS) SBAS: WAAS, EGNOS, MSAS, GAGAN
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-162dBm
Acquisition Sensitivity	-148dBm
AGPS Capable	

CELLULAR

Data Support	SMS, UDP Packet Data
Operating Bands (MHz Band)	
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 29.5 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

INTERFACES

OBDII Interface	J1850 PWM, J1850 VPW, ISO-9141-2, ISO-14230 KWP2000, ISO-15765, GM SWCAN and other OEM interfaces
LEDs	Communication, GPS and OBD Status
Outputs	None
Bluetooth	Bluetooth 4.0 Dual Mode (optional fit)

CERTIFICATIONS

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

ENVIRONMENTAL

Temperature	-30° to +75° C (operating) -40° to +85° C (storage)
Humidity	95%RH @ 50° C non-condensing
Shock and Vibration	SAE J1455
EMC/EMI	CE, GCF, eMark (all pending) RoHS Compliant

ELECTRICAL

Operating Voltage	9-16 VDC Vehicle Systems
Internal Battery	200mAh
Sleep Mode	Ultra low power sleep <3mA

PHYSICAL

Dimensions	43 x 64 x 25 mm
Weight	<52g
Enclosure	Rugged textured plastic enclosure
Communications	OBD, Cellular & GPS

Accelerometer	3 axis 16g, sampling at 400Hz for driver behavior and crash detection
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CONNECTORS

Built-in OBD-II/EOBDII interface via J1962 compliant connector

SIM Access

Internal
SIM fitted during manufacturing

MOUNTING

Via built-in OBD-II connector
Self-adhesive mounting with ODB-II extender cable

OPTIONAL FEATURES/FUNCTIONS

OBD-II Connector Cables
Splitters and Extensions
Serial Cable

OBD Data Extraction

Detection	Automatic detection of vehicle interface services
Extraction	Transmission of standard EOBD codes, plus manufacturer specific codes which are made available by the embedded OBD firmware stack
Scripts	Download of vehicle specific diagnostic scripts dependant on vehicle model variant

