



# OS-150 NextG Series

Economical GPS Tracking Unit



**Orbit Satellite**  
Vehicle Tracking Solution

## EXPERIENCE THE ADVANTAGE

- GSM/GPRS, CDMA 1xRTT or HSPA configuration
- Economical device
- Superior GPS & cellular performance
- Built-in cellular and GPS antenna for easy installation
- Low power sleep modes
- Built-in harness
- 3 inputs and 3 outputs
- Over-the-air update capability for configurations and firmware
- 3-axis accelerometer for motion, tilt, and impact detection

The OS-150 is an economical full featured vehicle tracking product designed for easy and reliable installation in automobiles. The OS-150 is an ideal solution for stolen vehicle, vehicle finance, auto rental and other automotive track and trace applications.

### COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The OS-150 high-value tracking unit from CalAmp features a small size, superior GPS performance, ultra low power sleep modes, and three Inputs/three Outputs (I/O). The OS-150 is a complete vehicle tracking and communications device incorporating next-generation, super-sensitive GPS technology on GSM/GPRS/CDMA 1xRTT/HSPA, cellular networks for installation in any 12 or 24 volt mobile vehicle. Superior internal antennas for both cellular and GPS eliminate the need for wired antennas and make the OS-150 mountable virtually anywhere in the vehicle for easy, inexpensive installations. Messages are transported across the cellular network using enhanced SMS or UDP messaging providing a reliable communication link between the device and your application servers. The OS-150 is designed to dramatically reduce cost of ownership, power and size while providing excellent field reliability.

### FLEXIBILITY

The OS-150 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-150 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-150 SPECIFICATIONS



## GENERAL

Communication Modes	UDP Packet data and SMS
Location Technology	50 channel GPS
Operating Voltage	12 and 24 volt vehicle systems

## 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	-147dBm
AGPS Capable	

## CELLULAR

Data Support	SMS, GPRS, CDMA 1xRTT or HSPA packet data	
Operating Bands (MHz)		
GSM/GPRS	850/900/1800/1900	
CDMA/1XRTT	850/1900	
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
	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 Inputs	3 fixed bias
Digital Outputs	3 open collector (150 mA)
Analog Inputs	1 internal VCC monitor
Status LEDs	GPS and cellular

## ENVIRONMENTAL

Temperature	-30° to +75° C (operating) -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; FCC-Part 15B; Industry Canada
RoHS Compliant	

## ELECTRICAL

Operating Voltage	6-32 VDC
Power Consumption	<2 mA @ 12V (deep sleep ) <10 mA @ 12V (sleep on network with SMS) <20 mA @ 12V (sleep on network with GPRS) <70 mA @ 12V (active standby)

## PHYSICAL

Dimensions	2.125 x 3.5 x 0.625", (54 x 89 x 16mm)
Weight	2.6 oz, (74 g) (internal)

## CONNECTORS, SIM ACCESS

SIM Access	Internal
Connection Type	Captive 8 wire harness

## CERTIFICATIONS

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

## MOUNTING

Standard tie-wrap or adhesive

## KEY FEATURES

- UDP and SMS-based messaging
- Internal cellular and GPS antennas
- Super sensitive GPS (-162 dBm)
- Ultra-low power sleep mode (<2mA)
- Built-in harness
- 3 inputs and 3 outputs
- Voltage monitoring and low battery notification
- 2,000 buffered messages
- 10 Built-in geo-fences
- PEG™ Exception-Based Rules
- Automatic, Over-The-Air Unit Configuration on Power-up (PULS™)
- Over-The-Air Firmware Download (PULS™)
- Web-Based Device Management (PULS™)
- 3-axis accelerometer for motion sense and tilt

## OPTIONAL FEATURES/FUNCTIONS

- Starter interrupt harness
- OBDII easy install harness
- External backup battery
- Serial programming cable

