



OS-100 NextG Series

Field Replaceable AA battery operated

Asset Tracking Unit



Orbit Satellite Vehicle Tracking Solution

EXPERIENCE THE ADVANTAGE

- GSM/GPRS, CDMA 1xRTT, or HSPA configurations
- 1 year battery life at 1 message/day (3 AA batteries)
- 2 year battery life at 1 message/day (6 AA batteries)
- IP66 sealed and rugged enclosure
- Built-in motion sensor
- Built-in cellular and GPS antenna for easy installation

The OS-100 is a battery operated asset tracking product designed for reliable, multi-year deployments. The OS-100 is an ideal solution for managing assets that will be deployed for long periods without maintenance needs.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The sealed OS-100 high-value tracking unit from CalAmp features a small size, superior GPS performance and replaceable AA Alkaline batteries. The OS-100 is a complete asset tracking and communications device incorporating next-generation, super-sensitive GPS technology on GSM/GPRS, CDMA 1xRTT and HSPA cellular networks for installation inside any mobile asset. Superior internal antennas for both cellular and GPS eliminate the need for wired antennas and make the OS-100 mountable virtually anywhere for easy, inexpensive installations. 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-100 is designed to dramatically reduce cost and size while significantly improving field reliability.

FLEXIBILITY

The OS-100 employs CalAmp's industry leading on-board alert engine, PEG™ (Programmable Event Generator). This advanced engine monitors external conditions and supports customer-defined exception-based rules to help meet the needs of your application. PEG 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 PEG, your unique application will meet demanding customer requirements. 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-100 also leverages CalAmp's industry leading over-the-air device management and maintenance system, PULS™ (Programming, Updates, and Logistics System). Configuration parameters, PEG rules and firmware can all be updated over the air. PULS 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.



OS-100 SPECIFICATIONS

GENERAL

Communication Modes	GPRS/EDGE/HSPA and CDMA 1xRTT packet data, UDP and SMS
Location Technology	50 channel GPS
Operating Voltage	3.6 volt internal battery pack

GPS

Location Technology	50 channel GPS (with SBAS)
Location Accuracy	SBAS: WAAS, EGNOS, MSAS, GAGAN
Tracking Sensitivity	2.0 meter CEP (with SBAS)
Acquisition Sensitivity	-162dBm
AGPS Capable	-147dBm

BATTERY PACK

Field Replaceable AA Batteries

Battery Options	3 or 6 1.5V AA Alkaline Cells
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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 1800/1900
CDMA/1XRTT	850 1800
HSPA/UMTS	(all bands)
HSPA data rates	5.6 Mbps upload/7.2 Mbps download
HSPA fallback	EDGE/GPRS/GSM quad band EDGE MCS1-MCS9 3GPP Release 6

CERTIFICATIONS

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

PHYSICAL

Dimensions	2.9 x 4.9 x 1.4" / 74 x 124 x 36mm
Weight	11 oz / 325 g

ELECTRICAL

Operating Voltage	3.6V internal battery
Power Consumption	<100 µA @ 12V (deep sleep) 70 mA @ 12V (active standby)

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
EMC/EMI	J1455 SAE J1113; FCC-Part 15B; Industry Canada
RoHS Compliant	

CONNECTORS, SIM ACCESS

SIM Access	Internal
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MOUNTING

Screw Mount
Magnet Mount

KEY FEATURES

- Battery life of 1 or 2 years at 1 message/day
- IP66 sealed and rugged enclosure
- Packet data (GPRS, CDMA 1xRTT, or HSPA) and SMS-based messaging
- Internal cellular and GPS antennas
- Super Sensitive GPS (-162 dBm tracking)
- Built-in 3-axis accelerometer for motion sense, tilt, and impact sensing
- Ultra low power sleep mode (<100µA)
- 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™)

DEVELOPMENT SUPPORT OPTIONS

Custom hardware and software development available

