



SP9824

LTE Waterproof Standby Asset Tracker

The Skypatrol SP9824 is an easy-to-deploy asset tracker built with innovative power management technology. It lasts up to seven years and features one of the longest battery lives among devices its size in the market. The built-in light sensors make the product sensitive to tamper attempts and its waterproof design allows it to be used in harsh environments. With internal temperature and light sensors, the product is ideal for a wide range of environmental monitoring applications such as cold chain logistics, warehouse management, cargo trucking, high-value static asset monitoring and more. It also is used for auto financing applications.

Special Features

- Global LTE CAT M1/NB1 with 2G fallback
- Up to 7-year standby time



- Waterproof, compliant to IP67
- Self-Powered with no need for vehicle power or external charger
- No installation required (put in the glove box, console or discrete location)
- Ideal for asset monitoring and lot management

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LTE Specifications

Operating Band	Cat M1/Cat NB1: LTE-FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28 LTE-TDD: B39 (for Cat.M1 only)
Data Transmission	eMTC (DL) 375 Kbps eMTC (UL) 375 Kbps NB1(DL) 32 Kbps NB1 (UL) 70 Kbps

EGPRS Specifications

Frequency	EGPRS 850 / 900 / 1800 / 1900 MHz
Data Transmission	GPRS multi-slot class 33 (33 by default) EDGE multi-slot class 33 (33 by default)

GNSS Specifications

GNSS Type	u-blox All-in-One GNSS receiver
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Sensitivity Autonomous: -147 dBm
Hot start: -156 dBm
Reacquisition: -160 dBm
Tracking: -162 dBm

Position Accuracy (CEP) Autonomous: < 2.5m

TTFF (Open Sky) Cold start: 27s average
Warm start: 27s average
Hot start: 1s average

General Specifications

Dimensions 87 x 51 x 30mm
3.43"(L) x 2.01"(W) x 1.18"(H)
87 x 51 x 33.5mm
3.43"(L) x 2.01"(W) x 1.32"(H) (magnetic case mounting version)

Weight 140g (4.94oz)
160g (5.64oz) (magnetic case mounting version)

Backup Battery 3 CR123A lithium batteries, 1400 mAh

Standby Time Standby current: < 8 μ A
1 report per day (GNSS on): 5 years
1 report per day (cell ID only): 7 years

Waterproof IP67 compliant

Operating Temperature -25°C ~ +60°C

Internal Temperature Sensor For temperature monitoring
Accuracy: $\pm 1^\circ\text{C}$



Internal Light Sensor	For tamper detection
Internal Motor	For vibration feedback after successful operation of function button
Magnetic Mounting Case (Optional)	For easy installation on metal surface

Interfaces

Function Button	Used for power on/off and working status checking
LTE Antenna	Internal only
GNSS Antenna	Internal only
LED Indicators	GNSS, PWR

Air Interface Protocol

Command Set	@Track protocol command
Transmit Protocol	TCP, UDP, SMS
Working Modes	Power saving mode for long standby time Continuous mode for emergency tracking
Scheduled Timing Report	Report position and status at preset time intervals
Geo-fences	Support up to 5 internal geo-fence regions



Low Power Alarm	Alarm when internal battery is low
Wakeup Report	Report when the device wakes up
Motion Detection	Motion detection based on internal 3-axis accelerometer
Reporting Frequency Adjustment	Intelligent adjustment of reporting frequency