

GL300 Series

**GL300 Series (LTE)
 LTE Cat M1/NB1 Advanced Asset Tracker**



The GL300 series (LTE) includes three GNSS asset trackers that are designed for lone worker, vehicle, pet and asset tracking applications. The ergonomically designed button makes the series ideal for applications requiring rapid emergency alert or instant geo-fencing based on current location.

The series supports LTE Cat M1/NB1 on multiple bands for operation in America, Europe, and Oceania with a fallback to GPRS.

FEATURES:

- Multi-constellation GNSS supporting the GPS, GLONASS and Beidou systems
- Thumb sized button with haptic feedback allowing confirmed emergency alert or instant geo-fence setting
- Low power consumption, long standby time with internal battery
- Full power management, can be connected to external DC power or battery
- Internal 3-axis accelerometer for power saving and motion detection
- Water resistant

	Region	Network/Operating Band	GNSS Type	Certificate
GL300W	Global	GSM: 850/900/1800/1900 MHz UMTS/HSPA:850(B5)/900(B8)/1900(B2)/2100(B1) MHz	U-Blox All-in-One Receiver	FCC/PTCRB/AT&T
GL300MA	North America	LTE eMTC/NB-IoT LTE B2/B4/B5/B12/B13	U-Blox All-in-One Receiver	PTCRB/FCC/Verizon/AT&T
GL300MG	Global	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)	U-Blox All-in-One Receiver	FCC/Verizon/PTCRB/AT&T/CE (Planned)

GSM Specs (ME, MB)

Frequency: 850/900/1800/1900 MHz

GSM Feature

GPRS multi-slot class 33 (default)

EDGE multi-slot class 33 (default)

LTE Specs

Operating Band

GL300MA: B2/B4/B5/B12/B13

GL300ME: B3/B8/B20

GL300MB: B3/B28

Data Transmission

eMTC (DL) 375 Kbps

eMTC (UL) 375 Kbps

NB1 (DL) 32 Kbps

NB1 (UL) 70 Kbps

GNSS Specs

GNSS Type: u-blox All-in-One GNSS receiver

Sensitivity:

Cols Start: -145 dBm

Tracking: -161 dBm

Position Accuracy (CEP): Autonomous: < 2.5m

TTF (Open Sky)

Cold start: 30s average

Hot start: 1s average

Air Interface Protocol

Transmit Protocol: TCP, UDP, SMS

Scheduled Report: Report position and status based on preset time intervals, distance, mileage or a combination of these settings

Low Power Alarm: Alarm when battery is low

Power On/Off Report: Report when the device is powered on and off.

SOS/Emergency Alarm: Special alarm based on digital input

Motion Detection: Motion alarm based on internal 3-axis accelerometer



Interfaces

Digital Input

1 positive trigger input for ignition detection

Analog Input: 1 analog input (0V-32V)

1-wire Interface: Support 1-wire temperature sensor (maximum 8 channels)

Power Output: 1 power output (3.3V) for external devices

Digital Inputs/Outputs:

4 negative trigger inputs for normal use, or 4 open drain outputs 150mA max drive current

Serial Port: 1 RS232 port

Cellular Antenna: Internal only

GNSS Antenna: Internal only

BLE Antenna: Internal only

LED Indicators: CEL, GNSS, PWR

Connector: 18 pin waterproof connector

General Specs

Dimensions:

9.9mm(L) x 26.7mm(W) x 77.9mm(H)

Weight: 93g

Internal Battery: Li-Polymer, 2600 mAh

Standby Time:

Without Reporting: 480 Hours

5 Min Reporting: 260 Hours

10 Min Reporting: 300 Hours

Water Resistance: IPX5 Compliant

Charging Voltage: 5V DC

External Battery Voltage: 3.5V to 4.2V DC

Operating Temperature: -20°C ~ +55°C