

GB100 Series

Battery Mounted Insurance Telematics Device

Model No.	Accelerometer	Gyroscope	Bluetooth	Certificate
GB100	Internal 3-axis accelerometer 100 Hz	N/A	N/A	CE/E-Mark

Specification:

GSM Specifications

Frequency	Quad band: 850/900/1800/1900 MHz Compliant to GSM phase 2/2+ -Class 4 (2W @ 850/900 MHz) -Class 1 (1W @ 1800/1900 MHz)
GPRS	GPRS multi-slot class 10 GPRS mobile station class B
RMS Phase Error	5 deg
Max RF Output Power	GSM850/GSM900: 33.0±2 dBm DCS1800/PCS1900: 30.0±2 dBm
Dynamic Input Range	-15 ~ -108 dBm
Receiver Sensitivity	Class II RBER 2% (-107 dBm)
Stability of Frequency	< 2.5 ppm
Max Frequency Error	±0.1 ppm

GNSS Specifications

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

Interfaces

GSM Antenna	Internal only
GNSS Antenna	Internal only
Bluetooth Antenna (GB100P)	Internal only
LED Indicators	GSM, GPS, PWR

General Specifications

Dimensions	91.5mm(L) x 51.5mm(W) x 11mm(H)
Weight	75g
Backup Battery	High temperature NiMH, 200 mAh
Water Resistance	IP65 compliant
Operating Voltage	8V to 32V DC
Operating Temperature	-20°C ~ +70°C -20°C ~ +70°C for storage
Internal Accelerometer	GB100: 3-axis Accelerometer: 100 Hz GB100P: 3-axis Accelerometer: 1600 Hz
Internal Gyroscope (GB100P)	MEMS gyro-sensor
Bluetooth (GB100P)	Support BLE 4.2 protocol

Air Interface Protocol

Transmit Protocol	TCP, UDP, SMS
Power Supply Monitoring	Report/alarm of external power and backup battery status
Scheduled Report	Report position and status based on preset time intervals, distance, mileage or a combination of these settings
Geo-fences	Geo-fence alarm and parking alarm based on up to 20 preset geo-fence regions
Speed Alarm	Unusual speed alarm via flexible monitoring of speed
Driving Behavior Monitoring	Aggressive driving behavior detection, including harsh braking, acceleration, etc.
Compressed GPS Data Packet	1 second GPS data packet while vehicle is in motion

Crash Data Packet Crash data collection from accelerometer up to 15 seconds before and after an incident