G62 2G /4G Cellular

Rugged, compact, weatherproof GPS tracking device

APPLICATIONS

Vehicle and Fleet Tracking

Anchoring and Security of Assets

Rental Equipment

Mining Equipment

Run Hour Monitoring

The G62 is a rugged, compact and waterproof GPS tracking device available for 2G, 4G LTE-CatM1 and NB-IoT networks globally. The electronics, backup battery and antennas are all located within the tough nylon-glass housing offering the ability to track and monitor any asset in the most demanding conditions.

FEATURES

- IP67 Rated
- High Sensitivity GPS with LNA
- 4G LTE Cat-M1
- 3D Accelerometer
- Internal backup battery
- 1 x Ignition Input
- 2 x Digital Inputs
- 1 x Analog Input
- 1 x Digital Output
- Driver ID (1-wire iButton)

MECHANICAL SPECIFICATIONS

Rugged IP67 rated housing	Nylon Glass Composite housing protects against the elements. This allows the G62 to be installed internally or externally on any asset in the most demanding conditions.
Dimensions	L 125 x W 80 x H 25mm
Operating Temperature	-20°C to +60°C[1] 1) On external power Below 0°C and above +40°C the internal backup battery will not be charged as a safety precaution due to the dangers associated with charging batteries at extreme temperatures.
Harness	7 wire harness

POWER

Automotive Power	8V to 36V DC (max)
Back-up Battery	1100mAh LiPo internal backup battery pack
Self-resetting fuse	The G62 passes stringent automotive power “load dump” tests to ensure that it will continue to operate in the harshest electrical systems. A built-in self-resetting fuse makes installation easy and safe.

OTHER

Internal Memory	Sufficient memory to store over 50,000 records. Normally data is sent to the server immediately but if the device is out of range there is space to ensure no data is lost – for many weeks of driving!
3-axis accelerometer	Allows the G62 to detect harsh driving events, and to go to ‘sleep’ when not moving, resulting in extremely low standby current

CONNECTIVITY

SIM Size	Micro (3FF) size cellular SIM card
2G or 4G	The G62 can be manufactured for specific markets around the world.
4G Modem	UBLOX SARA-R410-02B This modem can be configured to operate on either LTE-CatM1 or LTE-NB1 networks. Supported LTE bands: 1-5, 6, 8, 12, 13, 17, 19, 20, 25, 26, 28
2G Modem	2G: SARA-G350-02S-01 850/900/1800/1900 MHz

GPS TRACKING

GPS and Cellular Antenna	Internal GPS and cellular antennas tuned by RF laboratories for optimal performance. Having the antennas inside the housing makes for very simple and quick installation.
GPS/GLONASS Tracking	U-Blox EVA-M8Q, High sensitivity assisted GPS receiver with TCXO, 72 channel (-167dBm)
AssistNow Offline	AssistNow Offline aiding data or extremely fast time-to-first-fix and performance in urban canyon environments
Low Noise GPS Amplifier (LNA)	GPS signals are boosted by a special low-noise amplifier (LNA). This allows operation where normal units will fail to receive GPS signal

INPUTS AND OUTPUTS

3 x Digital Inputs	1 x Ignition input, permanent internal pull down, 0-50V 2 x Digital Inputs, configurable pull-up/pull-down, 0-50V
1 x Digital Output	1 x Switched Ground digital output[1], easily wired up to switch external lights, relays, buzzers etc. Can be used to immobilise a vehicle. 1) Shared with Analogue Input, meaning only 1 can be used at a time
1 x Analogue Input	0-30V Analogue input[2] 2) Shared with Digital Output, meaning only 1 can be used at a time
iButton	Low cost 1-wire iButton reader can be used for Driver-ID

FIRMWARE SMARTS

Auto-APN	Auto-APN allows the G62 to analyse the SIM card and select the correct APN details from a list that is pre-loaded in the device's firmware.
Text Message Setup	The G62 can be sent text messages to set the APN, server and other details
Fleixible Logging Parameters	The G62 trip logging is flexible and can be configured to log based on a variety of parameters including: • Elapsed time • Distance travelled • Change in heading • Change in speed • On Stationary • Accelerometer events (harsh driving)
Accident and Rollover Detection	The G62 uses the built-in accelerometer to detect high G impacts such as accidents and rollovers and reports these events to the server for emergency alerting.
Harsh Driving	The G62 automatically calibrates its built-in 3 axis accelerometer and uses this to detect harsh driving events: • Excessive acceleration • Harsh braking • Cornering at speed These events are logged in the G62 along with additional event statistics that allow back-end server platforms to perform sophisticated driver profiling and scoring.
Accident Data	The G62 keeps a second-by-second "black box" recording of valuable GPS and accelerometer data for a two hour window. This data can be automatically uploaded to the server when an accident is detected, or it can be requested manually.
Geo-Fences	The G62 has the capacity to hold hundreds of geo-fences that can be downloaded to it from the server. The G62 can use this geo-fence information to: • Implement arrival and departure alerts • Implement speeding zones with audible warning alerts • Implement "No-go" and "Keep-out" areas • Automatically control outputs, e.g. to switch on warning lights when inside a special area.
Ignition Detection	The G62 can determine a trip has started based upon: • Wired Ignition input (voltage on/off) • Emulated Ignition (GPS movement) • Run Detect (Voltage Increases)