# digital matter

# G62

## Cellular 2G or LTE-M / NB-IoT

Rugged and robust vehicle, trailer, or heavy equipment GPS tracking device with inputs/outputs, remote immobilization for fleet management, equipment monitoring, driver ID, theft recovery, and more

### Real-Time Tracking

High-precision GPS/GLONASS tracking device wired to assets for real-time tracking

### Backup Battery

Internal Backup Battery in case of loss of power or tampering

### Inputs/Outputs

2 x Digital Inputs, 1 x Switched Ground Digital Output, 1 x Ignition Digital Input

### Driver ID

1-Wire® or iButton® can be used to read Driver ID tags

### Driver Behavior

Run hour monitoring, accident and rollover detection, speeding, harsh braking, and more

### Ultra-Rugged

Weatherproof and ultra-rugged IP67 Housing

# Connectivity

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| 2G | 2G: SARA-G350-02S-01<br>850/900/1800/1900 MHz |
| LTE-M / NB-IoT | uBlox SARA-R410M Modem operates on all major global LTE-M and NB-IoT bands<br>Supported LTE bands:<br>1*, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 26*, 28<br>(*roaming bands) |
| SIM Size & Access | Internal Micro 3FF SIM |

# Location

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| Module | uBlox EVA-M8 |
| Constellation | Concurrent GPS / GLONASS |
| Channels | 72 Channel High Sensitivy Receiver |
| Tracking Sensitivity | -167dBM industry-leading tracking performance |
| GNSS Assistance | GNSS almanac data for greater sensitivity and position accuracy |
| Low Noise Amplifier | GPS signals are boosted by a unique low-noise amplifier (LNA) allowing operation where other units fail |

# Power

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| Input Voltage | 8-36V DC (max) |
| Self-Resetting Fuse | Built-in self-resetting fuse makes installation simple and safe. Stringent automotive power "load dump" tests are conducted to ensure operation in the harshest electrical systems. |
| Operating Current | ~25/50mA when moving<br>~150mA battery charging |
| Sleep Current | <1mA |
| Backup Battery | 1100mAh LiPo internal backup battery pack |

# Mechanics / Design

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| Dimensions | 125 x 80 x 25 mm (4.92 x 3.15 x 0.98") |
| Weight | 170 g (6.00 oz) |
| Housing | Ultra-Rugged Nylon Glass |
| IP Rating | IP67 rated housing ensures device can withstand fine dust, high-pressure spray, submersion for 30 mins in 1m of water, and extreme temperatures |
| Installation | 7 wire harness<br>1m Length |

# Mechanics / Design *(continued)*

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| Operating Temperature | -20°C to +60°C (connected to external power)<br>At < 0°C and > +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. |
| GPS Antenna | Internal |
| Cellular Antenna | Internal |
| RF Antenna | Internal |
| 3-Axis Accelerometer | 3-Axis Accelerometer to detect movement, high G-force events, and more |
| Diagnostic LED | Diagnostic LED signifies operation status |
| Flash Memory | Store weeks of records if device is out of cellular coverage. Storage capacity for over 10 days of continuous 30-second logging. |

# Interfaces

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| Digital Inputs | 2 x digital inputs with configurable pull-up/down<br>0-48V DC input range<br>On/Off thresholds:<br>Pull-up enabled: low at 0.8V, high at 1.0V<br>Pull-down enabled: low at 2.0V, high at 2.4V |
| Digital Outputs | 1 x Switched Ground digital output<br>Easily wired up to switch external lights, relays, buzzers, etc<br>Can be used to immobilize a vehicle |
| Ignition | 1 x dedicated ignition digital input 0-48V DC<br>5V on/off threshold |
| 1-Wire® or iButton® | 1-Wire® or iButton® can be used to read Driver ID tags. Readers available to suit multiple card formats. |

# Smarts

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| Auto-APN | Auto-APN allows the device to analyze the SIM card and select the correct APN details from a list that is pre-loaded in the device's firmware. |
| Accident & Rollover Detection | Configure accident and rollover alerts triggered by extreme changes in velocity and orientation of vehicle or equipment. Second-by-second GPS data is saved on the device's flash memory, with a capacity of approximately 2 hours of data. In the event of an accident, a subset of the data (60 seconds before / 10 seconds after) is uploaded to the server automatically (if configured) or can be requested manually for a detailed reconstruction of the incident. |
| Driver ID Options | iButton/1-wire for third-party readers for driver ID, access control, and logbooking |
| Driver Safety & Behavior | Monitor speeding, harsh acceleration, braking, cornering, idling, and more to improve safety and prevent unnecessary wear on vehicles |
| Geofence Alerts | The server can use device location to create geofences and alerts if an asset enters or leaves designated locations |
| Geofence Download to Device | Geofences can be downloaded directly to the device from Telematics Guru for enhanced location-based actions and alerts.<br>Maximum of 20 Geofences with up to 30 points per geofence. |

# Smarts     *(continued)*

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| GPS Jamming Detection | GPS Jamming or Interference can be detected and alerted on |
| In-Vehicle Alerts | Can be wired up to external buzzers or lights for in-vehicle alerts |
| Lone Worker Safety | Interface a variety of duress pendants to enable man-down alerts for lone worker safety monitoring. |
| Preventative Maintenance | Set reminders based on distance traveled and run hours to reduce maintenance and repair costs |
| Real-Time Tracking | Device remains continuously connected while on the move for real-time asset tracking |
| Remote Immobilization | Digital outputs can be connected to a relay to enable remote immobilization of vehicles and equipment in the case of theft, abuse, or unauthorized usage |
| Run Hour Monitoring | Calculate run hours and distance traveled (odometer) to understand and optimize asset utilization. |
| Sensor Monitoring | Interface with a range of devices and switches for seatbelt detection, duress and panic buttons, lights, in-cab warning buzzers, and more |
| Tamper Alerts | Instant alert if the device is removed from your asset or disconnected from its power source |
| Theft Recovery | Switch to Recovery Mode in the case of theft or loss to activate real-time tracking for asset retreival |

# Device Management

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| Flexible Configuration | Configure device parameters such as position update rate, movement and accelerometer settings, and more to fit any tracking application |
| OEM Server | Manage, monitor, configure, debug, update, and restart devices remotely from our cloud-based device management system |

# Integration

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| Third-Party Integration | TCP Direct or HTTPS Webhook |

# Security

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| Data Security | Military-level AES-256 Encryption from device to OEM Server to protect the integrity and confidentiality of telematics data. Data forwarded to third-party systems is sent via HTTPS for end-to-end security. |

# Warranty

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| Manufacturer's Warranty | One year manufacturer's warranty |

# Certifications

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| Please contact us for a full list of compliance specifications and documentation for your region. | **LTE-M / NB-IoT** - FCC, ISED, ACMA (DoC), CE (Doc), VERIZON<br>**2G** - ICASA, CE (Doc) |