

## Geotab GO7™: The World's Only Expandable Plug-&-Play Platform



### GO7™ Hardware Device

GO7<sup>™</sup> is a small yet extremely powerful telematics measurement tool. GO7<sup>™</sup> offers state of the art GPS technology, g-force monitoring,  $IOX^{™}$  expandability, and engine and battery health assessments. Using Geotab's patented tracking algorithm, it accurately recreates the vehicle's trips and analyzes incidents. Like all of Geotab products,  $GO7^{™}$  offers in-vehicle alerts to notify drivers instantly of infractions.  $GO7^{™}$  is truly a plug and play technology – it requires no dash mounted antennas and no splicing of wires.

#### **Top Features**

- Small form factor device
- Easy plug-and-play installation
- IOX<sup>™</sup> (Input-Output-Expander)
- Intelligent in-vehicle driver coaching
- Breakthrough accident detection and notification
- Ultra-accurate engine diagnostics
- High quality recording (CAN-BUS)
- Live vehicle data
- Fastest GPS acquisition time
- Compatible with Geotab's GPS fleet management software solutions
- Built-in accelerometer

# **Technical Specifications and Features**

Compliance	RoHS compliant, lead free
Size	75 mm (L) x 50 mm (W) x 23 mm (H)
Weight	70 g (0.15 lb)
Housing	Flame retardant black ABS
Environmental Tests	Operating Temperature: -30 to +70 °C
32 Mb Non-volatile Flash Memory Store	<ul> <li>Main Data Memory: Records 4,650 miles (7,500 km) of city driving (40,000 logs).</li> <li>Accident Data Memory: Buffer records over 100 minutes of second-by-second data (6,000 logs). Last 72 records (1.2 minutes) are sent instantly on accelerometer triggered accident-level events.</li> </ul>
Engine Management	<ul> <li>Diagnostics supported on:</li> <li>CAN: ISO 15765</li> <li>Diesel Engines: SAE J1939 &amp; J1708</li> <li>Legacy OBD: SAE J1850 PWM/VPW, ISO 9141-2, and ISO 14230 KWP2000.</li> <li>On-Board Single Wire CAN (GM J2411)</li> <li>CCD bus (Chrysler)</li> <li>Medium Speed CAN (Ford)</li> <li>Variable Input Output Module (non-standard)</li> <li>Adapter packs available for heavy duty vehicles.</li> </ul>
Operating Voltage	8 V to 36 V
Current	<ul> <li>Operating Mode: 120 mA</li> <li>Sleep Mode: 2.7 mA.</li> <li>Internal current draw measurement</li> <li>Resettable over-current protection to I/O expanders (IOX)</li> </ul>
Recording Parameters	Patented, curve-based GPS/voltage/accelerometer/ engine data logging algorithm for fewer, more accurate data points.
I/O Expandability Support (IOX™)	<ul> <li>Driver ID</li> <li>Garmin</li> <li>Iridium</li> <li>Auxiliary</li> <li>Hours of Service (HOS)</li> <li>Serial Port for 3<sup>rd</sup> party device integration</li> <li>And more!</li> </ul>
Over The Air (OTA) Support	<ul> <li>Firmware Updates: For maintenance, new features, and custom-applications</li> <li>Parameters: For turning additional features on/off</li> <li>Almanac/Ephemeris Data: For quicker GPS latch</li> </ul>
In-cab Buzzer	<ul> <li>Driver Feedback: Harsh braking, harsh acceleration, harsh corners, over-revving, excessive idling and speeding, engine based seatbelt violations (when available), and custom.</li> <li>Test Mode: Diagnostic beeps for system of GPS and wireless connection.</li> </ul>
Clock	Internal clock is set by initial GPS latch and counts seconds for time based activity during sleep mode including heartbeat and voltage recording.

Voltage Recording	Curve based voltage logging to detect weak batteries, failing alternators, and failing starters.
Heartbeat	Device wakes out of sleep mode at pre-defined intervals to send buffered data, such as position and voltage data.
Antennas (GPS and cellular)	Internal
Accelerometer	3-axis accelerometer for low-voltage digital output linear MEMS, housed in an LGA package. Full scale ( $\pm 2g$ , $\pm 4g$ , $\pm 8g$ and $\pm 16g$ ), capable of measuring accelerations with an output data rate of 100 Hz or 400 Hz.
Installation	Simple plug and play
Intelligent Ignition Detect	Non-engine based ignition detect based on voltage and movement allowing for 2-wire installation. Perfect for older vehicles with no engine information and covert installation for asset recovery.
GPS Receiver	<ul> <li>UBX-G6010-ST</li> <li>Voltage: 2.5 V to 3.6 V</li> <li>50-channel u-Blox 6 engine</li> <li>Under 1 second Time-To-First Fix for hot and aided starts.</li> <li>Hybrid GPS/SBAS engine (WAAS, EGNOS, MSAS)</li> <li>3GPP compliant</li> <li>A-GPS: AssistNow Online and AssistNow Offline services</li> </ul>
Cellular Module	<ul> <li>GO7 2G: MT6252A chipset(M5206 2G Module)         <ul> <li>GSM/GPRS: 850/900/1800/1900</li> </ul> </li> <li>GO7 3G: MT6276A chipset(M7600 3G Module)         <ul> <li>GSM/GPRS: 850/900/1800/1900</li> <li>UMTS: Band I/Band II/Band V</li> </ul> </li> <li>Voltage: 3.8 V</li> <li>CurrentConsumption: 500 mA @ 4.2 V (2G)         <ul> <li>400 mA @ 4.2 V (3G)</li> </ul> </li> <li>Embedded TCP/IP stack</li> <li>Certifications: PTCRB. Other certifications pending.</li> </ul>

## **Installation Instructions**

Before installing your  $GO7^{\text{TM}}$  device, ensure no dash warning lights are on in the vehicle while it is running. Also verify device compatibility with your vehicle type with your reseller.

### GO7™ Installation

 Locate the vehicle's engine diagnostic port typically found in the driver's area at or below knee level. Note: Commercial vehicles with diesel engines use a different connector system. Contact your reseller for diesel connector applications or for extension harnesses should it be necessary to locate your GO7™ away from the engine diagnostic port location.



2. Align the receiver end of the GO7<sup>™</sup> with the engine diagnostic port and simply push in place, ensuring that the device is secure. You will hear 6 quick beeps and all three lights on the GO7<sup>™</sup> will flash briefly.



3. Start the vehicle and allow it to run for approximately 3 minutes. During this time period, you will notice the Red LED will power on and illuminate on the face of the device. Shortly afterwards the Green and Blue LEDs will illuminate as the device links up with the cellular and GPS networks. This initial start-up may take several minutes to complete, and assumes the vehicle is parked outdoors.



## **Verify Your Installation**

 Your GO7™ serial number, which can be found at the bottom of your GO7™ device, is required for this step.

Navigate to http://myinstall.geotab.com and fill in your name, email address, and the Geotab serial number. Once complete, click **Check**.



2. You will now see a similar screen with GREENtext to indicate that your installation was successfully completed. If you see REDtext instead, you must check the installation.



## **Warnings and Cautions**

**WARNING:** Mapping, navigation and tracking features available through Geotab software is dependent on third party mapping data and services and the availability and accuracy of the Global Positioning System ("GPS") operated by the United States government. Both third party data and services as well as GPS is subject to changes which may affect the accuracy or performance of mapping, navigation and tracking information or graphics presented through the use of Geotab software. Geotab products, software and services are not intended for use for primary navigation, route planning or similar purposes, as information presented may be inaccurate, delayed or misinterpreted. Relying on Geotab software for such purposes may result in incorrect navigation leading to unsafe driving situations.

**WARNING:** Geotab's products and related software and services are not designed or intended for use in emergency or failsafe situations including, without limitation, situations: (A) where failure of same may result in a risk of property damage, death or personal injury; (B) where Geotab's products, software or services are used to alert others upon the occurrence of certain vehicular events recorded by Geotab in-vehicle devices; or (C) requiring fail-safe controls or fail- proof delivery of information, including without limitation any operations involving radioactive or hazardous materials, life support systems or munitions or weapons. Communication features in Geotab in-vehicle devices may be interrupted or inoperable if a vehicle travels outside of a network coverage area or where there is a fault or service interruption with the carrier. Communication of data through Geotab in-vehicle devices also requires transmission of data through the internet. Failure in internet access will result in the interruption of communications.

**WARNING:** Do not attempt to install, reconfigure or remove any product from any vehicle while the vehicle is in motion or otherwise in operation. All installation, configuration or removal must be done only in stationary vehicles which are securely parked. Attempting to service units while being operated could result in malfunctions or accidents, leading to death or serious personal injury.

**WARNING:** If at any point after a Geotab in-vehicle device is installed, a warning light illuminates on the vehicle dash or the vehicle stalls or has a marked drop in performance, shut off the engine, remove the device, and contact Geotab support.

**WARNING:** Do not attempt to remove Geotab in-vehicle devices from the vehicle in which they are originally installed for installation in another vehicle. Not all vehicles are compatible with Geotab in-vehicle devices, and doing so may result in unexpected interactions with your vehicle, including sudden loss of power or shutdown of the vehicle's engine while in operation or cause your vehicle to operate poorly or erratically.

**WARNING:** All in-vehicle devices and related cabling must be securely fastened and kept clear of all vehicle controls, including gas, brake and clutch pedals. You must inspect devices and cabling on a regular basis to ensure all devices and cabling continue to be securely attached. Loose cabling or devices may impede the use of vehicle controls, resulting in unanticipated acceleration, braking or other loss of vehicle control, which could lead to death or serious personal injury. Improperly fastened in-vehicle devices may detach and impact operators upon sudden acceleration or deceleration, which may cause injury.

**CAUTION:** Geotab products do not contain any user-serviceable parts. Configuration, servicing, and repairs must only be made by an authorized Geotab reseller or installer. Unauthorized servicing of Geotab products will void your product warranty. Improper installation may also lead to short circuits and the risk of fire, leading to personal injury or significant damage to your vehicle. Installation or servicing may also require modifications to your vehicle. Failure to comply with specified procedures or without adequate knowledge of the vehicle may result in damage to your vehicle, which may cause malfunctions of vehicle controls or vehicular environmental systems and result in personal injury.

**CAUTION:** Geotab in-vehicle devices must be kept clear of debris, water and other environmental contaminants. Failure to do so may result in units malfunctioning or short-circuiting, causing a fire hazard.

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#### FCC Regulations:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's auth ority to operate the equipment.

Cet appareil est conforme aux dispositions de la partie 15 des règles de la FCC et des normes CNR d'Industrie Canada sur les appareils radio exempts de licence. Son utilisation est assujettie aux deux conditions suivantes : (1) Cet appareil ne doit pas causer d'interférence nuisible; et (2) cet appareil doit accepter toute interférence reçue, y compris l'interférence qui pourrait causer un fonctionnement non désiré. Cet équipement a été testé et jugé conforme aux limites d'un appareil numérique de la Classe B, en vertu de la partie 15 des règles de la FCC et de la NMB-003 canadienne. Ces limites sont conçues pour fournir une protection raisonnable contre l'interférence nuisible dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence et, s'il n'est pas installé et utilisé conformément aux instructions, peut causer une interférence nuisible aux communications radio. Toutefois, il n'est pas garanti que l'interférence ne se produira pas dans une installation particulière. Si cet équipement cause une interférence nuisible à la réception radio ou de programmes de télévision, laquelle peut être déterminée en éteignant et en allumant l'équipement, l'usager est encouragé à essayer de corriger l'interférence par l'une ou plusieurs des mesures suivantes:

- Réorientez ou relocalisez l'antenne de réception.
- Augmentez la séparation entre l'équipement et le receveur.
- Connectez l'équipement à une prise sur un circuit différent de celui auquel de le receveur est connecté.
- Consultez le vendeur ou un technicien radio/de télévision pour obtenir de l'aide. La FCC ou Industrie Canada peut vous obliger à arrêter d'utiliser votre appareil si une telle interférence ne peut pas être éliminée.

GO7 G2/ GO7 G3n'a pas approuvé les changements ou modifications apportés à cet appareil par l'usager. Tous les changements ou modifications apportés peuvent entraîner la révocation de l'autorisation d'utilisation de l'appareil.

#### **RF Exposure Information**

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be I ess than 20cm (8 inches) during normal operation.

GO7 2G FCC ID: N69-835000 GO7 3G FCC ID: N69-835100

#### **IC Notice**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following t wo conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L' exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

#### **IC Exposure Information**

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

GO7 2G IC: 10677A-835000 GO7 3G IC: 10677A-835100