



## G4Echo Specifications

The G4Echo is a passive GPS tracking system that requires no driver input and no continuous monitoring. All functions of the system are recorded onboard the vehicle and are maintained within the Vehicle Tracking unit until extraction. Extraction is performed by Bluetooth wireless technology. Vehicle data is transmitted to the BlueADL Base Station when the vehicle returns to the office.

### The G4Echo Vehicle Unit includes the following two components:

#### 1. G4Echo

- ◆ 4"W x 1"H x 6.5"L
- ◆ Weight, 1.5 lb.
- ◆ GPS chipset for satellite data communications
  - 12 Channel, L1 (1575.42 MHz) C/A code
  - Datum: WGS-84
  - Acquisition Time:
    - Hot Start: 8 seconds typical
    - Warm Start: 38 seconds typical
    - Cold Start: 45 Seconds typical
  - Position Accuracy: 10 meters, 2D
  - Velocity Accuracy: 0.1 m/s
- ◆ Bluetooth Transceiver onboard for wireless communications
  - Frequency: 2.400 – 2.4835 GHz
  - Antenna: Internal
  - Transmit Power: +20 dBm (Bluetooth Class 1)
  - Sensitivity: -79 dBm typical
  - Range: > 100 meters, line of sight, open air
  - Qualification: B00922
- ◆ Environmental Conditions
  - Operating Temp: -20°C to 70°C
  - Storage Temp: -65°C to 100°C
  - Humidity: 5-95% Non-Condensing
- ◆ 6000+ Record storage capacity
- ◆ Solid aluminum extruded case with black anodized finish and adjustable mounting bracket
- ◆ Rear female SMA connection for GPS antenna
- ◆ Rear 25-pin male plug-in for power supply and extra event connections
- ◆ 25-pin 12 wire cable approx. 5 to 6 feet long. Attaches to the vehicles wiring harness or to fuse panel with inline fuses for power and ignition (both supplied)
- ◆ Power (red wire): unswitched 12v (nominal), 135ma (typical)
- ◆ Ignition source required (green wire)
- ◆ Ground source required (black wire)
- ◆ +12Volt activated Extra events (2) (violet and brown wires) Allows for monitoring of PTO (Power Take Off) units, refrigeration units, open/closed doors or other external vehicle operations monitoring (records start/stop times, location and speed of such events)
- ◆ Ground Activated Extra events (3) (white, gray, yellow wires) senses ground closure. Allows for monitoring of PTO (Power Take Off) units, refrigeration units, open/closed doors or other external vehicle operations monitoring (records start/stop times, location and speed of such events)



## 2. Antenna

- ◆ 2" GPS antenna
- ◆ Magnetic base
- ◆ Weight, 0.5 pounds
- ◆ Coaxial cable connection (approximately 10 feet)
- ◆ SMA male end connection (attaches to vehicle unit)



## G4 Echo Base Station

- ◆ 4"W x 1"H x 6.5"L
- ◆ Weight, 1.25 lb.
- ◆ Solid Aluminum case, black anodized finish
- ◆ Bluetooth Transceiver
  - Frequency: 2.400 – 2.4835 GHz
  - Antenna: Internal
  - Transmit Power: +20 dBm (Bluetooth Class 1)
  - Sensitivity: -79 dBm typical
  - Range: > 100 meters, line of sight, open air
  - Qualification: B00922
- ◆ Environmental Conditions
  - Operating Temp: -20°C to 70°C
  - Storage Temp: -65°C to 100°C
  - Humidity: 5-95% Non-Condensing
- ◆ USB PC interface
- ◆ USB cable included



## Optional External Mount

- ◆ Weather tight camera case
- ◆ USB extender
  - Range: 45m (150 feet)
  - Interconnect: CAT 5 cable
  - Termination: RJ45 Male



## G4 Echo Software Components

### TMI Passive Downloader/Uploader

- ◆ Requires Windows XP, Service Pack 2
- ◆ MSDE Database Management included
- ◆ Microsoft SQL Database Structure
- ◆ Broadband Internet connection recommended



### Web-based report viewer

- ◆ Password controlled access for multiple users
- ◆ Data is available on any computer with an internet connection
- ◆ Editable GPS location database
- ◆ Data online for at least 45 days
- ◆ Report Types: Vehicle History, Time Card, Summary, Speed Violation, Exceptions, Travel Log, Locations
- ◆ Reports viewable by vehicle or group
- ◆ Maps automatically updated as new data become available
- ◆ Show single vehicle, group, or entire fleet on map