Commercial Vehicle Productivity and Security

The 6485 is a versatile and economical GPS tracking beacon designed for fleet management needs in local delivery and service fleets, transportation, utility vans and construction vehicles.

With highly sensitive GPS and 4G LTE embedded antennas, an integrated OBDII port connector for power and an extremely compact design, the Vecima 6485 can be installed in a matter of seconds which substantially reduces the high cost of installation.

Combined with our commercial mobile monitoring portal, subscribers can manage and view the location of any or all vehicles in a fleet, run a variety of valuable reports, and even manage vehicle maintenance alerts.

Security features include vehicle theft detection and tracking.

Features and Benefits

| Feature	Benefit
Real-time location	View location of vehicle on a map in real-time for dispatch and vehicle recovery, or track at specified time intervals
Route logs	Archive records of vehicle movements
Ignition on/off	Know when vehicle engine is on or off for maintenance and productivity reports
Start and stop movement	Determine actual arrival and departure times
Zone (Geofence) notifications	Receive notifications upon entering or exiting circular or polygonal zones – multiple zones monitored simultaneously
Speed notifications	Manage excessive speed by receiving notifications upon crossing a set speed threshold or a posted speed limit
Idle report and notification	Help eliminate fuel wastage by knowing when a vehicle engine was on but the vehicle was not utilized
Arm where parked	Automatically establish a secure perimeter around the vehicle wherever it is parked
Power Cut notification	A warning is issued if the device suddenly loses power or is removed from the vehicle
High Accelaration	An alert is generated when the vehicle accelerates too quickly
High Deceleration	Harsh braking events will generate alerts
Harsh Cornering	If the vehicle corners too quickly an alert is generated
Accident Detection	An alert is generated if a potential accident is detected

Specifications

Location Technology
- 50+ channel GPS (with SBAS)
- Accuracy: 2.0 meter CEP

Network Functionality
- 4G LTE Cat 1
- Frequency Bands (MHz): 1900 (B2)/AWS 1700 (B4)/700 (B12)
- 2000 buffered messages

Power Requirement
- 12/24 VDC Vehicle Systems
- DC Power 9-30V
- Internal Battery 180mAH

Physical Connection
- J1962 compliant connector
- Integrated GPS and Cellular Antennas

Mechanical
- Rugged textured plastic enclosure
- Dimensions 1.8" x 2.6" x 1.1"(46 x 67 x 28mm)
- Weight 1.75 oz (50 grams)
- Operating Temperature -22 to +140°F (-30 to +60°C)

Applications of GPS Fleet Management

- Improve productivity of mobile staff
- Improve customer service
- Prevent misuse of company resources
- Recover stolen or misplaced vehicles
- Provide monitored security for drivers
- Reduce fuel wastage and maintenance costs

Installation Notes

Since 1996, North American vehicles have supported the On-Board Diagnostics-II protocol (OBD-II). The port that supports OBD-II connectors and devices (including the Vecima model 6485 beacon) is typically found beneath the dash on the driver's side of the vehicle.
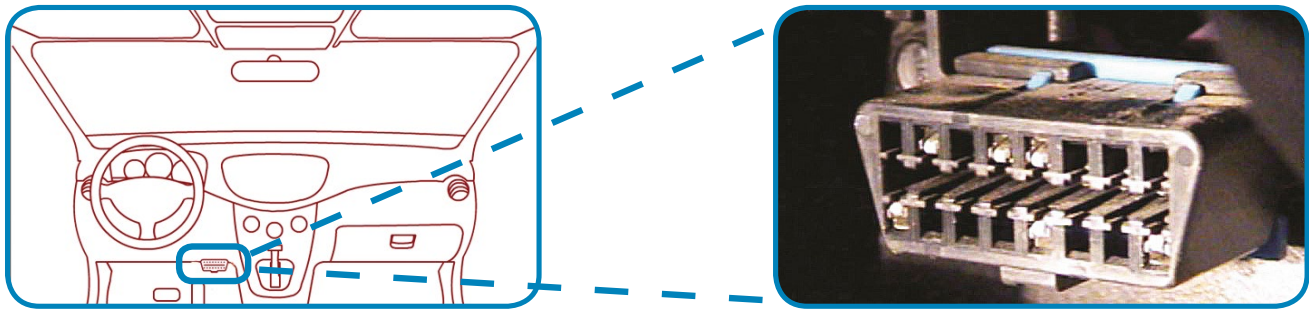
With the vehicle ignition turned off, install the beacon by pressing it firmly onto the vehicle port. The beacon is powered from the vehicle battery, allowing communication to start right away. Connectivity can be confirmed by looking at the LEDs (see LED Indicators below) and by checking the portal for ignition events once the vehicle is started.

If the device is removed from the OBDII port, a Power Cut notification will be generated, and the device will continue to communicate using the backup battery for approximately 2 hours.

If the 6485 is plugged directly into the OBDII port, it is recommended to secure the device using a zip tie to prevent it from being accidentally dislodged or removed.

Installing the 6485 with a Y-cable will allow the device to remain connected while other diagnostics equipment is in use. There are two Y-cable variants that may be used (see below), and if used, the 6485 must be secured in place beneath the dash, as movement or excessive vibration will cause inaccurate results for accelerometer functions.

Part #6480-YC is a simple splitter that plugs directly into the front of the OBDII port. The 6485 is installed on one of the free ends, and the other end remains available for other use.

Part #648x-YCC is for a covert installation. One end of the cable replaces the existing OBDII port, while the 6485 may be installed beneath the dash out of sight. Please refer to this video for installation instructions

If required, a 1-foot OBDII extension cable is also available (**Part #6480-EC**)

LED Indicators

The Vecima 6485 has three LEDs on the side of the device which provide feedback about the current state of the device

LED	LED Patterns	
Green (GPS Status)	Off Slow Blink Fast Blink Solid	GPS is off GPS is on GPS is syncing time GPS is obtaining a fix
Orange (Communication status)	Off Slow Blink Fast Blink Fast Blink / Solid Solid	Modem is off Modem is on ...searching for network Network is available Registered but not acknowledged Registered and acknowledged
Red (VBus status)	On Off	Ignition is on Ignition is off

Warnings and Known Issues

• The Vecima 6485 may be incompatible with certain models of electric or hybrid vehicles. For more information please contact your Vecima dealer.

• Some electric vehicles are equipped with two OBDII-style ports. One is the EV port used by the manufacturer for firmware updates, and the other is the OBDII diagnostic port used for the 6485. **Plugging the 6485 into the EV port may damage the vehicle.** Check your vehicle documentation to correctly identify the ports.

• It is important that the device is installed fully onto the OBDII port, and that the port itself is firmly attached to the vehicle. Excessive vibrations caused by loose connections can cause incorrect results.

• The Vecima 6485 is not a waterproof or sealed device. Care must be taken to ensure the device is kept away from water or any other liquids.