

GSM/GPRS/GPS MOBILE LOCATION UNIT

The GPS AVL Unit is a general purpose tracking device that adds security and tracking capability to portable assets such as generators, compressors, backhoes, bobcats, as well as cars, trucks, trailers, containers and busses, etc.



How does the GPS AVL Unit work:

The GPS AVL tracking system employs three separate networks to provide remote tracking services. The Global Positioning Satellite (GPS) network, GSM/SMS Wireless Cellular Network and the Internet.

The GPS AVL device installed on your vehicle, asset or person, uses the signal supplied by the GPS Satellite to establish its location, speed and direction of travel. When you need to see the location of your asset, simply go the Geobis secure website, or your own server website, login, using your secure name and password, click on the appropriate icon.

A SMS message is then sent to your asset, vehicle or persons tracking device over the GSM cellular wireless network. The device receives the message and sends back its coordinates that are then displayed on the map on your computer screen.

- ❑ Quad band (850/900/1800/1900 Mhz) GSM / GPRS Class B - Multislot 10
- ❑ UDP and SMS Transport options
- ❑ Powerful Event Engine with On Board Intelligence. Supports triggers, geofences, speed alert, input, ignition sense, time, distance, network status, gps status and power management. Reporting is delivered in flexible data formats such as ASCII or Binary
- ❑ Two digital inputs
- ❑ One output (sink 250mA)
- ❑ Voice and SMS enables
- ❑ Supports Dynamic IP notification architecture with "Keep Alive" feature
- ❑ Data buffer for out of coverage conditions
- ❑ Three status indicators LEDs (2 user defined)
- ❑ 9-30V DC power input
- ❑ Multiple server reporting options
- ❑ Over the Air configuration
- ❑ Mobile Data Terminal support.



PRODUCT SPECIFICATIONS

System Requirements:

Interface: Serial Host DSUB 9 connector
 L x W x H: 4.0 x 5.0 x 1.6 in
 Housing: One Piece, seamless Aluminum Extrusion
 TX Power: Class 4 (2W @850/900 MHz)
 Class 1 (1W @1800/1900 MHz)
 Slot Class: MS10 (4RX/2TX, 5 MAX)

Application Interface:

- Host Protocols: PPP, AT Commands, UDP, TCP/IP (future release)
- Internal Protocols: UDP, TCP/IP (future release)
- API Control/Status: AT or UDP
- Friend's IP Feature
- Auto - Registration software upon power-up
- Over the air commands for:
 - I/O Control •Status Change Reporting
 - GPS TX Interval •GPS Content
 - Binary Reporting •Event Reporting
 - Timed Reporting •Distance Reporting
 - Alarm Reporting •Geo-Fencing

Environment:

Operating: -30°C to + 70°C
 Spec. Compliant: -20°C to + 60°C
 Storage: -40°C to + 85°C
 Humidity: Up to 95% non-condensing

SIM Card - Interface - I/O:

- SMA Antenna Connector for 3.3 Vdc GPS 3.3
- External SIM accesible via end cap
- Audio connection
- TNC Antenna Connector for GSM
- 3 Pin I/O - 2 Input, 1 Output
 - 3 LED Status indicators
 - 1 Ignition Sense
- 1 Audio Input/Output

GPRS Packet Data:

Mode: Class B, Multislot 10 Certified
 Protocol: GPRS Release 97, SMG 31
 Coding Schemes: CS1 - CS4
 Packet Channel: PBCCH/PCCCH

GSM Funtionality:

Voice: Full Rate, Enhanced full rate and half rate, AMR (TT8540)
 CS Data: Asynchronous, transparent and non transparent up to 9.6 KB
 GSM SMS: Text, PDU, MO/MT Cell broadcast

Band Operation:

TT8540 (850/900/1800/1900)

Status indicator

Power On:

Registration Status
 GPS Status
 User Defined

Part Number:

TT8540 850/900/1800/1900

Certification (Pending):

TT8540
 FCC: Part 15,22,&24 Part 15
 GCF: Version 3.11.0 Version 3.5.1
 PTCRB: Version 2.9.1 Version 2.7.2
 Industry: Canada Canada
 RTTE RTTE

Power:

DC Volt: 9 - 30 V

TT8540 BAND	@12V MODE	Avg (mA)	Peak (A) @ (dBm)
GSM 850 & 900	1TX/1RX	390	0.600 @ 32.5
	1RX	180	
	Idle	65	
GSM 1800 & 1900	1TX/1RX	400	0.570 @ 32.0
	1RX	190	
	Idle	55	

GPS Functionality:

SMA Antenna Connector for GPS
 Support 3.3V Active Antenna
 GPS Protocols: NMEA, TAIP
 Stores GPS Messages Feature

- Flexible Reporting Format
- NMEA ASCII and Binary
- Time/Distance Reports
- I/O Event Reporting
- Ignition Sense
- Geofencing
- Power Management
- Buffered Data when out of coverage