



Vehicle Tracking Unit

Based On GSM and GPS Technologies

CAL-ON GSM/GPS Vehicle Tracking Device with ABS Plastic Enclosure, IP65 grade and built-in LBS feature uses most advanced 32 Bit ARM Cortex M3 Microcontroller for superior operation in toughest conditions supported by highly sensitive GSM/GPRS modem / GPS receiver and high gain GSM + GPS internal antennas providing accurate real time data.

Supporting wide operating voltage (DC 9V to 36V), the device has provision for Li-Ion internal battery (7.4V / 900 mA) and built-in charging mechanism. Apart from just tracking of vehicle location, CAL_ON VTU also provides additional information like status of Ignition / Engine, Digital Inputs, Digital Outputs, Analog Inputs, Main Battery Status and Status of external accessories connected like Fuel Sensor, RF Reader ... etc.

BSTPL-14 has provision for generating alerts either SMS or GPRS for Ignition, IO Ports, Over Speed, Main Power Tampering, Internal Battery, Harsh Breaking and Harsh Acceleration. Device has provision for buzzer for indicating SOS activity and over speed alert.



Product Features

- ◆ 32 Bit Cortex M3 Microcontroller
- ◆ External Flash for storage of data when GPRS is not available
- ◆ Multi Slot Class 12 GSM / GPRS Module
- ◆ 48 Channel GPS Receiver with -161 dBm gain
- ◆ Local and Over The Air (OTA)* Software Download
- ◆ Local and Over The Air (OTA) Configuration
- ◆ Secured Over The Air (OTA) Configuration
- ◆ Supports SMS; TCP; UDP and HTTP Communication Protocols
- ◆ Built in Geo-Fence Feature (10 Zones)
- ◆ Configurable Geo-Fence zones locally and Over The Air (OTA)
- ◆ GPS Odometer
- ◆ Wide DC Input Operating Voltage (9V to 36V)
- ◆ Main Power Reverse connection protection
- ◆ Main Power Over Voltage protection
- ◆ Built-In 7.4V / 900 mA Li-Ion Battery.
- ◆ Alert for low internal battery
- ◆ On demand vehicle location on GPRS enabled phones
- ◆ Remote device status monitoring
- ◆ Alert for GPS Antenna Tampering
- ◆ Alert for Main Power tampering
- ◆ Alerts for Over Speed, Harsh Acceleration* & Harsh Breaking*
- ◆ Alert for Ignition and Engine On & Off *
- ◆ Alerts for IO Ports status
- ◆ GPS Odometer
- ◆ SOS Switch supporting configurable message and 3 numbers
- ◆ Buzzer indication for SOS switch*
- ◆ Buzzer indication for over speed*
- ◆ Default IOs: 2 Digital Inputs; 1 Digital Output & 1 Analog Input
- ◆ RS232 Serial Port
- ◆ Configurable GSM & GPS intervals for Main Power, Internal Battery and Roaming
- ◆ Dynamic Data Sending Mode
- ◆ Configurable history data sending methods
- ◆ User Configurable Alerts (SMS / GPRS)
- ◆ LED Indication for Main Power; Internal Battery; GSM & GPS Status
- ◆ Provision for 2 server IPs and Ports
- ◆ Provision for 2 server mobile numbers



Applications

- ◆ Fleet Operators
- ◆ Public Transport Vehicles
- ◆ Emergency vehicles
- ◆ Commercial Vehicles
- ◆ Infrastructure Sites
- ◆ School Transport vehicles
- ◆ Personal vehicles
- ◆ Security Applications
- ◆ Taxi Services
- ◆ Courier & Cargo Services

Benefits

- ◆ Provides real time vehicle location
- ◆ Improves response time
- ◆ Information about status of various parameters like Ignition, Engine, AC, Over Speed... etc
- ◆ Better control on fleet Efficiency, which reduces the fleet operating cost
- ◆ Improve Vehicle routing and make it more efficient and productive
- ◆ Avoids unauthorized use of Vehicle
- ◆ Monitors vehicle driving conditions which helps to control fuel costs
- ◆ Extends fleet life
- ◆ Prevent loss of goods and services
- ◆ Avoidance of fraudulent claims
- ◆ Theft recovery
- ◆ Monitor the health of Vehicle battery
- ◆ Integration Of third party accessories like RF Readers, Temperature sensors and Fuel level sensors
- ◆ GPS Odometer to cross check vehicle odometer

Technical Specifications

Operating Voltage:	DC 9V to 36V Optional 7.4V / 1000 mA Li-Ion Battery
Operating Voltage:	9 to 36V DC 7.4V / 900 mA Li-Ion Internal Battery
MCU & Memory :	ARM Cortex-M3; 32 Bit; 64K SRAM; 256K Flash External Data Flash Storage
GSM / GPRS :	Dual Band GSM 900 / 1800 MHZ
Communication :	Sensitivity: -107 dBm GPRS Class 12 (Max. 85.6 kbps - Uplink & Downlink) Protocols: TCP/ UDP/ HTTP SMS: Point to Point MO & MT; Text & PDU Mode
GPS Communication :	L1 Frequency; 1575.42 MHZ 48 Channels -160 dBm gain Horizontal Position Accuracy of <2.5 meters
LED Indications :	LED for Main Power LED for Internal battery LED for GSM Network LED for GPS Network
External Interfaces :	Power Cable with Ios RS-232 Serial Port SOS Switch
Mechanical :	IP65 ABS Plastic Enclosure Dimensions: 99 x 70 x 32 mm Wall / Table Mounting
Environmental :	Operating Temperature: -20° to +65° C Storage Temperature: -25° to +75° C Humidity: 95% ROH Non Condensing

CAL-ON INSTRUMENTS

An ISO 9001:2008 Certified Company
 Sy.No-193, Phase-IV, IDA, Cherlapally,
 Hyderabad – 500051. INDIA
 Tel: 040-27260203 / 27260262
 Email: info@cal-on.com
www.cal-on.com