Infinitybox TM1 Telemetry Module

Product Description:

The TM1 is a powerful, cellular based telemetry module with broad applications in vehicles, stationary equipment and monitoring services. Inside is a completely integrated GPS receiver with cellular transceiver for sending and receiving data and commands. It offers complete flexibility to monitor events, store data, send out GPS location and broadcast alarms. It can stand alone as its own system, connecting directly to sensors, switches and external relays. It can also act as part of a larger system, connecting through J1939 or the Infinitybox CAN protocol.

The TM1 can send periodic messages through email or SMS to update you on the status of your vehicle, process, machine or building. That way you know when you need to check in, maintain or service your application. You can also get immediate, real-time alerts when things go wrong. This includes attempted theft, freezing conditions, leakage and voltage outages.

Product Features:

- Monitors, logs and transmits data and GPS coordinates.
- Flexibility to turn functions on and off remotely through cellular network.
- Accepts digital and analogue inputs.
- Integrated outputs for external relay control.
- External CAN Gateway to connect to Infinitybox peripherals or J1939 devices.
- Internal memory storage for data logging.
- Integrated Tri-Axial Accelerometer for collision and accident detection.
- Rugged and sealed enclosure for use in all environments.
- Complete access to vehicle driving data to optimize routes, reduce fuel consumption and comply with Anti-Idling requirements.
- Does not rely on existing infrastructure to send and receive data in stationary applications.
- Enterprise-based software solution to optimize data security.

Applications:

- Mobile Applications
  - Busses, limousines & coaches
  - Armored vehicles, command vehicles and tactical vehicles
  - First-responder vehicles
  - Service & Utility trucks
- Stationary Applications
  - HVAC
  - Air Compressors
  - Generator Sets
  - Water-Treatment Processes
  - Pools and Spas
  - Vacant buildings, rental properties and vacation homes
User Interface:

Our customers have two options for interfacing with the Infinitybox TM1 system.

The simplest interface is through email or SMS. Customers can schedule periodic communications sent to their inbox or smart device. These transmissions can include an update on all of the critical data related to their application. Additionally, real-time alerts can be programmed to send immediate alarms if necessary.

Our customers also have the option for an integrated, enterprise-based dashboard to monitor and interact with their TM1 modules in the field. Our team can create custom applications based on specific requirements. Contact the Infinitybox sales team for more information at (847) 232-1991 or email us at sales@infinitybox.com.

Optional Accessories:

- **TM1-HARN01**
  - Universal wiring harness with Deutsch DTM06-12SA Connector and 24” Flying Leads.

- **TM1-HARN02**
  - 120-VAC Power adaptor with Deutsch DTM06-12SA Connector.

- **TM1-ANT01**
  - Active SMA GPS Antenna

- **TM1-ANT02**
  - GSM/GPRS SMA Antenna

- **TM1-IOX01**
  - 10 Channel I/O Expander

Technical Specifications:

- **Input Voltage:** 8 to 36 VDC
- **Transmitting Current Draw:** 0.100 A
- **Sleep State Current Draw:** <0.005 A
- **Enclosure**
  - Integrated Mounting Holes
  - Sealed to IP67
  - Standard Deutsch Connector System
  - LED Indicators for system status
  - External SMA connectors for GPS & GSM/GPRS antennae
- **Environmental Protection**
  - Temperature Rating: -20 C to 85 C
- **Cellular Technology:**
  - GSM/GPRS
  - 3G/4G
  - Quad Hz- 850/900/1800/1900 MHz
- **Inputs / Outputs**
  - 4 Inputs- Selectable
    - 0 to 5 Volt Analogue
    - Ground Switched
    - High-Side- Maximum High-Side voltage is 12-VDC.
  - 4 Outputs- Low-Side Switched. Maximum current is 0.50 Amps at 12 VDC.
- **Optional CAN Protocols**
  - Infinitybox CAN- expandable to include Infinitybox CAN peripherals.
  - J1939 at 250 kb/second
- **Integrated Accelerometer**
  - Tri-axial- X, Y & Z
  - Maximum measured acceleration: 3G.
  - Alarm thresholds can be set based on acceleration limits.
- **Internal Memory Storage**
  - SD Card- Options up to 16 GB