Sixnet
GSM HSPA MOBILE GPS MODEM

The BT-5800v2 is a rugged 3G modem that offers internet connectivity over the cellular network to in-vehicle applications. Whether to issue violations, look up license plates, report status of accidents, transmit patient data, or enhance dispatch, the BT-5800v2 provides mobile workers a continuous real-time link for their bandwidth demanding and mission critical mobile data applications.

PRODUCT HIGHLIGHTS

- Always-on high-speed wireless connectivity
- Latest 3G technology - GSM HSDPA and HSUPA with 7.2 Mbps peaks
- Multiple interfaces: Ethernet, USB and Serial
- Rugged design per MIL-STD-810F
- High sensitivity GPS with augmentation system
- TAIP and NMEA GPS protocols
- General purpose Inputs and Outputs
- Advanced event reporting engine
- Remote device management

BENEFITS

- Provides ubiquitous cellular coverage with no maintenance fees
- Improves emergency response time
- Mobile transmission of patient data
- Increases worker's safety by optimizing communication with dispatch center
- Improves incident management and route planning
- Provides broadband connectivity to multiple devices in the vehicle

MOBILE DATA APPLICATIONS

- Mobile resource management (Mobile computing)
- Public Safety (Police, Fire, Ambulance & EMS)
- Transit
- Field Force Automation

GPS FEATURES

Embedded GPS makes this wireless modem ideal for deployment in Public Safety and First Responders applications as well as in Automatic Vehicle Location (AVL), Intelligent Transportation Systems (ITS) and field service automation applications. Used to track the geographic location of vehicles, assets are better managed and safety of personnel is increased.

- Performance: enhanced sensitivity GPS receiver with augmentation system, providing a fast time to first fix and accuracy within 2 meters.
- Multiple destinations: ability to send GPS positions over the wireless network to multiple server destinations, and to a local mobile computer at the same time.
- Multiple protocols: support of industry standard TAIP and NMEA, along with BlueTree's BEP (BlueTree Event Protocol).
- Standalone mode: leverages the embedded intelligence and programming capabilities of the modem to collect, store and forward GPS position data, without the need to attach a computing device.
- Store and Forward: managing the reporting of GPS data when in and out of wireless coverage to ensure customers have accurate tracking

UNIQUE CELLULAR COVERAGE

The modem incorporates a second cellular antenna connection for diversity. When used in conjunction with the main antenna, receiver sensitivity is improved resulting in increased connectivity, coverage and reliability.

GENERAL PURPOSE INPUTS AND OUTPUTS

Featuring 10 GPIOs and 1 dedicated Ignition Sense for vehicle telemetry:

- 3 digital outputs that can be turned ON or OFF on command, or automatically when an event is triggered – allowing for remote control of sirens, door locks, and other.
- 4 digital inputs allow monitoring of vehicle sensors such as doors, parking brake, or panic buttons.
- 3 analog inputs can be employed to measure a variety of special purpose gradient sensors such as temperature of a refrigerated vehicle or level of a battery.
- Vehicle Ignition ON/OFF notification
- Low voltage alert

EVENT REPORTING ENGINE

By monitoring signals such as position/velocity, IOs and cellular state, the modem can report a variety of events to a server application:

- Time-based and or distance-based real-time tracking
- Excessive speed & engine idling
- Report at different intervals depending on speed or input trigger
- Trip odometer
- IO state change or threshold reached

REMOTE DEVICE MANAGEMENT

By offering remote over the air diagnostics, configuration & firmware upgrades, on-site visits to troubleshoot or perform changes are virtually eliminated – and the health of the fleet of deployed modems is more efficiently managed.

MULTIPLE INTERFACES: SERIAL, USB AND ETHERNET

Support of the three most commonly used data interfaces guarantees drop-in interoperability with any application equipment, current and future. Even more, all interfaces can be used simultaneously for over the air access to different vehicle terminals.

MODEM PERFORMANCE

- 1xRJ45 Ethernet 10/100 Mbps auto-sensing
- 1x RS-232 Serial DB9 at rates up to 115,200bps
- 1x USB2.0 TypeB device port at rates up to 12 Mbps
- Power voltage 8 - 30 VDC (12 and 24 nominal)

LED INDICATORS

- 7x LEDs: Power, WAN, Signal, RS232
- GPS, Ethernet Link & Activity

INPUTS & OUTPUTS

- 1x Reset Button
- 3x Digital Outputs
- 4x Digital Inputs
- 3x Analog Inputs
- 1x Ignition Sense

GPS PERFORMANCE

- Accuracy: <2 meters (50%), <4 meters (90%)
- Acquisition: Hot Start = 3 s, Warm Start = 35 s, Cold Start = 38 s
- Sensitivity: Tracking = -160 dBm, Acquisition = -146 dBm
- Augmentation System: SBAS (WAAS, EGNOS)

ENVIRONMENTAL

- Operating Temp: -40 to +85 Celsius
- Humidity: 95% non-condensing
- Shock: MIL-STD-810F
- Vibration: MIL-STD_810F
- Automotive: SAE J1455
- Alumi. 166 x 107 x 56 mm (6.5" x 4.2" x 2.2"), 498g (1.1 lb)

All specifications are subject to change. Consult factory for latest info.

ORDERING GUIDE

BT-5800v2   GSM HSPA Mobile GPS Modem

Note: This Modem has AT&T, Kore and Rogers approvals

SOFTWARE TOOLS

The BlueTree 5800v2 can easily be configured, monitored and managed using the following BlueVue software applications.

BlueVue Device Manager
For initial setup and configuration