MobilityPro® BT-5000 Series Cellular Modem

Sixnet Networking Series

red lion®

►►► Mobile Cellular Connectivity

Sixnet MobilityPro® 5000 industrial cellular modems deliver always-on connectivity for secure, real-time communication to mobile data applications. Whether to search license plates, issue violations, report accidents, transmit patient data or improve dispatch, MobilityPro modems provide mobile users with a continuous real-time link to mission-critical data applications. Fast connection and support for 4G LTE enhances high-speed communications, including the ability to seamlessly stream in-vehicle video. Built-in BlueTree event protocol enables signal monitoring such as position/velocity, I/O status and cellular connection as well as support for a range of event reporting to server applications. Easy configuration, over-the-air diagnostics and upgradable firmware increase usability while reducing cost of ownership. Wi-Fi (3G models) or USB host options give on-the-go workers the flexibility to securely connect to multiple laptops, handheld devices and more. With embedded GPS functionality, MobilityPro modems are ideal for in-vehicle public safety, first responder, fleet automation and intelligent transportation systems deployments where high-speed, secure communication is vital.
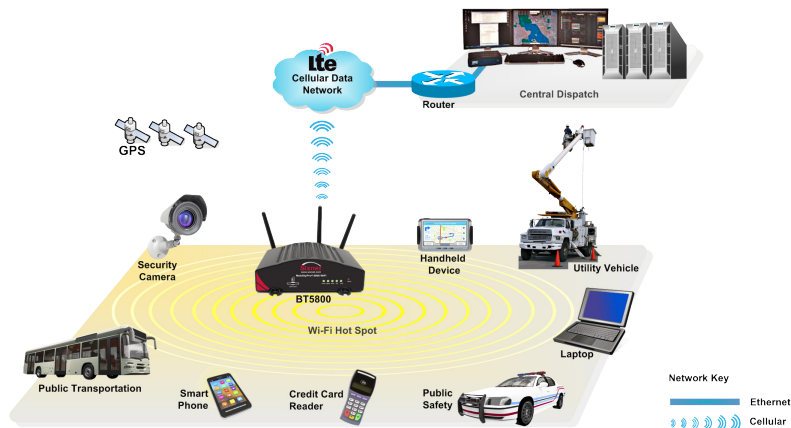
PRODUCT HIGHLIGHTS

- Rugged design to MIL specs protects against shock and vibration
- Optional Wi-Fi connectivity creates secure mobile hotspots
- Optional USB host allows expansion to support additional serial devices
- High-speed 4G LTE technology provides always-on connectivity
- High-sensitivity GPS coupled with advanced event reporting enables enhanced tracking applications
- Remote device management reduces on-site visits
- Software Development Kit supports custom applications

APPLICATIONS

- In-vehicle resource management
  - Public safety
  - First responder
  - Fleet automation
  - Public transit
  - Intelligent transportation systems
  - Field service automation
- Portable and fixed cellular connectivity
  - Mobile merchants
  - Remote kiosks
  - Convenience stores

APPLICATION SCENARIO: MOBILE OFFICE

FEATURES & BENEFITS

Lower Cost of Ownership
- **Speeds deployment and reduces on-site visits**
- **Provides flexible connectivity across devices**
  - Remote device configuration, diagnostics and firmware upgrades
  - Custom applications with Software Development Kit
  - Multiple antenna options
  - General purpose inputs and outputs

High-Speed 4G LTE Vehicle Access
- **Lowers mobile communication costs**
- **Reduces emergency response time**
  - 3G (GSM WCDMA/HSDPA/HSUPA or EVDO Rev A)
  - 4G LTE
  - Embedded GPS functionality

Optional Wi-Fi (3G models) & USB Connection
- **Increases flexibility of data access**
- **Improves mobile efficiency and safety**
  - Wi-Fi option enables high-performance wireless LAN connectivity
  - USB host supports additional serial connections

Advanced Event-Reporting Engine
- **Optimizes fleet management and tracking**
- **Increases mobile efficiency and safety**
  - Vehicle ignition on/off
  - Real-time and distance-based tracking
  - Speed, idling and I/O state change reports

Rugged, Compact Design
- **Deploys easily in space-constrained areas**
- **Delivers proven reliability**
  - Operating temperature: -40°C to +75°C*
  - Industrial, shock-resistant packaging

industrial networking

SPECIFICATIONS

Wireless Interface
- VZW LTE with fall back to: EVDO Rev. A, CDMA EVDO (Rev. 0), CDMA 1xRTT
- Other 4G carriers (i.e. AT&T, Bell, Telus, Rogers)**
- 3G Dual-band CDMA2000 EVDO Rev. A (backward compatible with 1xRTT)
- 3G HSPA (backward compatible with EDGE)

GPS
- Accuracy
  - < 2m: 50%
  - < 4m: 90%
- Acquisition
  - Hot start: 3 seconds
  - Warm start: 35 seconds
  - Cold start: 38 seconds
- Sensitivity
  - Tracking: -160 dBm
  - Acquisition: -146 dBm
- Augmentation: SBAS (WAAS, EGNOS)
- GPS protocols: TAIP and NMEA

Management & Reporting
- Advanced event reporting engine
- Remote device management
- Web-based network monitoring

Wi-Fi Option (3G models)
- 802.11 b/g 2.4 GHz radio compliant access point
- Single SSID
- Supports up to 128 concurrent users
- WEP (64/128 bit, only for b/g)
- 802.11 authentication
  - IEEE 802.1x
  - EAP-MD5/TLS/TTLS/PEAP
- SSID broadcast disable

Inputs & Outputs
- 1x reset button
- 1x ignition sense
- 4x digital inputs
- 3x digital outputs
- 3x analog inputs

LED Status Indicators
- Power
- WAN
- Signal
- GPS
- RS-232
- Ethernet link
- Ethernet activity

Interfaces
- 1x RJ45 10/100 Mbps autosensing
- 1x RS-232 Serial DB9 (up to 115,200 Mbps)
- 1x USB1.1 Type B device (up to 12 Mbps)
- Optional USB host

Power
- Supported range: 8-30 Vdc
- Nominal: 12 Vdc

Mechanical
- Dimensions (HxWxD): 6.5″ x 4.2″ x 2.2″ (166 x 107 x 56mm)
- Weight: 1lbs 1oz (489g)

Environmental
- Operating temperature: -40°C to +75°C*
- Humidity: 95% non-condensing
- Shock: MIL-STD-810F and MIL-STD-202
- Vibration: MIL-STD-810F
- Automotive: SAE J1455

Warranty
- 3 years on design and manufacturing defects

All specifications are subject to change. Contact Sixnet to learn more.

* See Hardware Manual for thermal considerations.
** Future capabilities.

ORDER GUIDE

PART NUMBER	DESCRIPTION
BT-5600v2	CDMA EVDO Rev. A with 1 Ethernet port and 1 serial port
BT-5600v2-U	CDMA EVDO Rev. A with USB host, 1 Ethernet port and 1 serial port
BT-5630v2	CDMA EVDO Rev. A with Wi-Fi connectivity, 1 Ethernet port and 1 serial port
BT-5700	4G LTE/3G/2G with 1 Ethernet port and 1 serial port
BT-5700-U	4G LTE/3G/2G with USB host, 1 Ethernet port and 1 serial port
BT-5800v2-GE	GSM HSPDA/HSUPA with 1 Ethernet port and 1 serial port
BT-5800v2-GE-U	GSM HSPDA/HSUPA with USB host, 1 Ethernet port and 1 serial port
BT-5830v2	GSM HSPDA/HSUPA with Wi-Fi connectivity, 1 Ethernet port and 1 serial port

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