# SocketWireless Bluetooth Benefits

Embedded Serial-to-Bluetooth® Module



#### Eliminates serial cables Bluetooth V1.2 compliant Transparent to application software AT command software interface

SocketWireless Bluetooth is a wireless serial adapter that utilizes Bluetooth technology to provide a secure, standards-based wireless connection between a host and peripheral device. Providing wireless data transfer up to 100 meters, it completely eliminates the need for serial cable connections. This ready-to-integrate, embedded, wireless module is designed around Multi-Tech's space-efficient, universal socket architecture.

### Features

- Class 1 Bluetooth V1.2 compliant module with a maximum range of 100 meters (330 feet)
- Creates wireless serial link transparent to application software
- Secure and robust communication link
- Operating system independent
- Serial interface supporting speeds from 1200 bps to 921.6K bps
- AT command software interface
- Hardware flow control
- Space efficient, universal socket connectivity
- LED driver outputs
- Auto connect
- Two-year warranty

Complete, Ready-tointegrate Embedded Serial-to-Bluetooth<sup>®</sup> Module



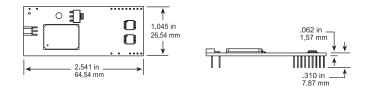
# Highlights

*Applications.* SocketWireless Bluetooth is targeted at applications that need a serial connection without running cable. It is an ideal solution for:

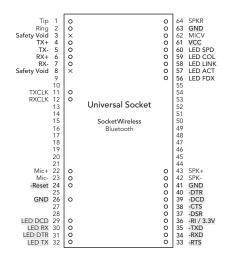
- Retail Environment
  - POS devices
  - Bar code scanners
  - Credit card reader
- Restaurant Environment
  - Order printer
  - Receipt printer
  - Credit card reader
- Outdoor signs
- Gas pumps
- Security systems/Surveillance cameras
- Emergency vehicles
- Delivery trucks
- Home healthcare
- Connecting to other Bluetooth-enabled devices
- Modem
- Mobile phone
- Headset
- Computer
- PDA
- **Instant Serial Cable Replacement.** Running serial cabling can be expensive and sometimes problematic especially if it is in an outdoor environment. With the SocketWireless Bluetooth, you can eliminate the cable and connect your peripheral devices effortlessly with a Bluetooth wireless network. In a point-to-point connection, one SocketWireless is embedded in a host device, such as a PC; the other is attached to a serial peripheral device such as a bar-code scanner, receipt printer or scale. Now you can use the wireless network to transfer information between the host and the device for up to 100 meters.
- *Wireless Host Connection.* SocketWireless Bluetooth can also connect to any other Bluetooth-enabled device, such as a PDA or WAN radio increasing user mobility in mission-critical applications such as emergency vehicles, delivery trucks, medical monitoring, and point-of-sale environments. SocketWireless Bluetooth is operating system independent and can be seamlessly embedded in any peripheral device. No application software is needed.
- **Secure, Robust Communication.** SocketWireless Bluetooth complies with the Bluetooth specifications for security and includes 56-bit encryption and 10 alphanumeric Personal Identification Number (PIN) authentication. It utilizes FHSS (Frequency Hopping Spread Spectrum) technology. In addition, SocketWireless Bluetooth uses error correction schemes for guaranteed packet delivery.

**Universal Socket Connectivity.** The Universal Socket flexible comm-port architecture provides dial-up, wireless, ISDN or Ethernet socket connectivity with interchangeable modules. This means you can utilize one system design and populate it with your communication module of choice. In addition, you are assured seamless migration to future technologies.

# **Mechanical Specifications**



*SocketWireless Bluetooth Pin-out.* SocketWireless Bluetooth interfaces easily with existing devices through a standard serial interface. The serial DTE channel is capable of transfer speeds up to 921.6 Kbps and can be interfaced directly to a UART or microcontroller.



- **Developers Kit.** The SocketWireless Bluetooth Developer's Kit allows you to plug in the SocketWireless Bluetooth and use it for testing, programming and evaluation. The kit includes one development board with RS-232 DB-25 connector, universal power supply, antenna and RS-232 cable.
- *Comprehensive Service and Support.* The Multi-Tech commitment to service means we provide a two-year product warranty and service that includes free technical support, 24-hour web site, and ftp support.

Who's Multi-Tech? Multi-Tech is an ISO 9001:2000 certified global manufacturer of award-winning Internet access, remote access, telephony, and modem solutions. Since 1970, Multi-Tech has provided corporations in over 135 countries with superior modem technology, delivering the most reliable and highest speed connections possible. With over 60 U.S. patents and numerous international patents, you can look to Multi-Tech for communication technology innovation.

## **Specifications**

**Power Requirements** 5VDC or 3.3VDC Power Usage (Typical) Idle: 2mA (0.0066W @ 3.3VDC) (0.01W @ 5VDC) Connected: 7mA (0.0231W @ 3.3VDC) (0.035W @ 5VDC) Fast Data: 45mA (0.1485W @ 3.3VDC) (0.225W @ 5VDC) Inquiry: 70mA (0.231W @ 3.3VDC) (0.35W @ 5VDC) Physical Description 1.045" w x 2.541" h x 0.680" d; 0.6oz (2.65 cm x 6.45 cm x 1.7 cm; 0.017 kg.) Operating Environment Temperature Range: -40 to +70°C Approvals EMC: FCC Part 15 Class B, Canada Class B, EN55022 Class B, EN55024

## Ordering Information

**Product** MTS2BTSMI MTS2BTSMI-L Description Serial-to-Bluetooth Module, C1 V1.2-5V

Safety: UL 60950; EN 60950, CSA 950 Wireless: FCC Part 22, FCC Part 24, Canada

> Region Global Serial-to-Bluetooth Module, C1 V1.2-3.3V Global

Made in Mounds View, MN, U.S.A.

Trademarks: SocketWireless, Multi-Tech, and the Multi-Tech logo: Multi-Tech Systems, Inc. / All other products or technologies are the trademarks or registered trademarks of their respective holders.

World Headquarters (763) 785-3500 Tel: (800) 328-9717 www.multitech.com

EMEA Headquarters Multi-Tech Systems (EMEA) United Kingdom Tel: +(44) 118-959 7774

Multi-Tech Systems (EMEA) France Tel: +(33) 1 64 61 09 81



11/04 86002058 Copyright © 2004 by Multi-Tech Systems, Inc. All rights reserved.