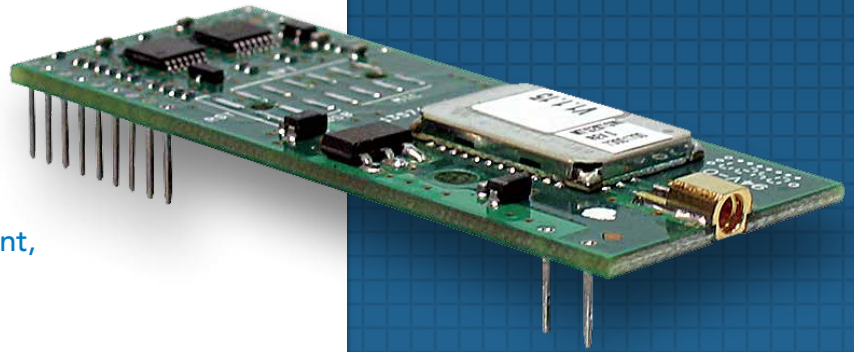


## Embedded Serial-to-Bluetooth® Device Server

The SocketWireless® Bluetooth® device server 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 communications device is designed around Multi-Tech's space-efficient, universal socket architecture.

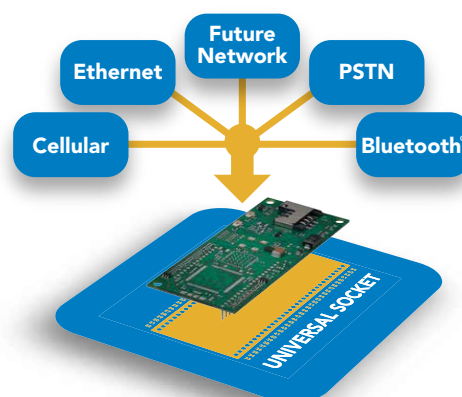


### Features

- Class 1 Bluetooth V2.0 compliant communications device with a maximum range of 100 meters (330 feet)
- Creates wireless serial link transparent to application software
- Supports point-to-point and multi-point communications
- 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 for visual monitoring speed, link, activity, collision and duplex mode
- Auto connect
- Two-year warranty

### Universal Socket Benefits

- Interchangeable communications devices
- Quick-to-market
- Global approvals
- Easy migration to future networks



## Specifications

### Power Requirements

5VDC or 3.3VDC

### Power Usage (Typical)

Idle: 1.5mA @ 3.3VDC, 1.6mA @ 5VDC

Master Connected: 6mA @ 3.3VDC, 7mA @ 5VDC

Fast Data: 21mA @ 3.3VDC, 38mA @ 5VDC

Master Inquiry: 68mA @ 3.3VDC, 74mA @ 5VDC

### Physical Description

2.541" L × 1.045" W × 0.680" H; 0.6 oz.  
(6.45 cm × 2.65 cm × 1.7 cm; 0.017 kg.)

### Operating Environment

Temperature Range: -40° to +70° C

### Approvals

EMC: FCC Part 15.247:2004 (subpart C), EN 301 489-1 V1.4.1 (2002-08)

Safety: UL 60950; EN 60950, CSA 950, UL 60950-1, IEC60950-1, ACA TS001/AS3260, CCC

EMC: FCC CFR47 Part 15 (Class B); ICES-003 Canada (Class B); EN 55022 (Class B), EN 55024

## Highlights

### Applications

The SocketWireless Bluetooth device server is targeted at applications that need a serial connection without running cable. It is ideal for:

- Connecting to other Bluetooth-enabled devices
- Delivery trucks
- Emergency vehicles
- Gas pumps
- Home healthcare
- Outdoor signs
- Restaurant Environment
- Retail Environment
- Security systems/ Surveillance cameras

### 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 device server, you can eliminate the cable and connect your peripheral devices effortlessly with a Bluetooth wireless network. In a point-to-point connection, one device server 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

The SocketWireless Bluetooth device server 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. It is operating system independent and can be seamlessly embedded in any peripheral device. No application software is needed.

## Secure, Robust Communication

The SocketWireless Bluetooth device server 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, it uses error correction schemes for guaranteed packet delivery.

## SocketWireless Bluetooth Pin-out

The SocketWireless Bluetooth device server interfaces easily with existing devices through a standard serial interface. The serial DTE channel is capable of transfer speeds up to 921.6 K bps and can be interfaced directly to a UART or microcontroller.

(I/O) Tip	1	○	64	SPKR (O)
(I/O) Ring	2	○	63	GND (O)
Safety Void	3	×	62	MICV (I)
(O) TX+	4	○	61	VCC (I)
(O) TX-	5	○	60	-LED SPD (O)
(I) RX+	6	○	59	-LED COL (O)
(I) RX-	7	○	58	-LED LINK (O)
Safety Void	8	×	57	-LED ACT (O)
	9		56	-LED FDX (O)
	10		55	
(O) TXCLK	11	○	54	
(O) RXCLK	12	○	53	
	13		52	
	14		51	GPIO (I/O)
	15		50	GPIO (I/O)
	16		49	GPIO (I/O)
	17		48	GPIO (I/O)
	18		47	
	19		46	
	20		45	
(I)	21		44	
(I) Mic+	22	○	43	SPK+ (O)
(I) Mic-	23	○	42	SPK- (O)
(I) -Reset	24	○	41	GND (I)
(I) USB_VBUS	25	○	40	-DTR (I)
(I) GND	26	○	39	-DCD (O)
(I/O) USB_DP	27	○	38	-CTS (O)
(I/O) USB_DN	28	○	37	-DSR (O)
(O) LED DCD	29	○	36	-RI (O)
(O) LED RX	30	○	35	-TXD (I)
(O) LED DTR	31	○	34	-RXD (O)
(O) LED TX	32	○	33	-RTS (I)

## Universal Socket Connectivity

Multi-Tech's universal socket is a flexible, comm-port architecture that provides cellular, Ethernet, PSTN or Wi-Fi® network access with interchangeable communications devices. This means you can utilize one system design and populate it with your connectivity device of choice accommodating multiple connectivity requirements. In addition, you are assured a seamless migration to future technologies.

## Ordering Information

Product	Description	Region
MTS2BTSMI	Serial-to-Bluetooth, C1 V2.0 5V	Global
MTS2BTSMI-L	Serial-to-Bluetooth, C1 V2.0 3.3V	Global

## Developer's Kit

The Developer's Kit allows you to plug in the communications device 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.

## Services & Warranty

Multi-Tech's comprehensive Support Services programs offer a full array of options to suit your specific needs. These services are aimed at protecting your investment, extending the life of your solution or product, and reducing total cost of ownership. Our seasoned technical experts, with an average tenure of more than 10 years, can walk you through smooth installations, troubleshoot issues and help you with configurations. Products include a 2-year warranty.

## Installation Support

Multi-Tech's Installation Support Service delivers priority service with the ability to work one-on-one with an experienced Multi-Tech technical support engineer, to guide you through the installation process for our products.

## Technical Support Services

At Multi-Tech, we're committed to providing you personalized attention and quality service while providing you a quick response to your product support needs. We have several options of support for you to choose from.

For additional information on Support Services as well as other service offerings, please contact your Multi-Tech representative or visit [www.multitech.com/support.go](http://www.multitech.com/support.go).

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