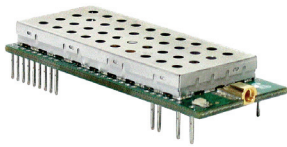


SocketWireless® Wi-Fi®

Embedded Serial-to-Wi-Fi Device Server



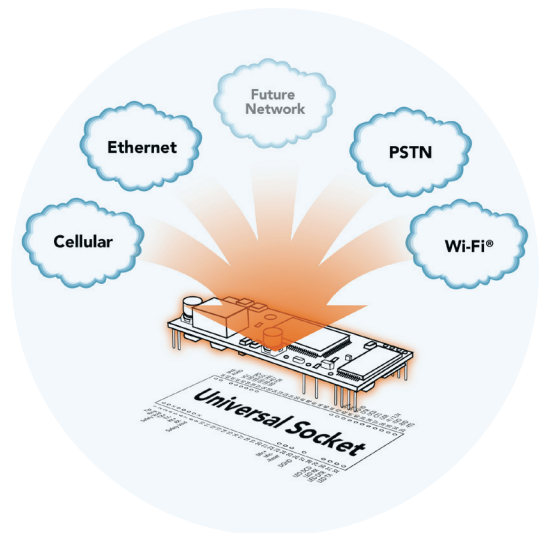
The SocketWireless® Wi-Fi® device server connects serial devices to an IP network via 802.11b wireless networking. It enables you to build wireless networking into virtually any device allowing for remote monitoring, control and configuration. The space efficient communications device (1" x 2.5") integrates a complete TCP/IP protocol stack, and can make your existing and next generation device, machine or system, IP-ready while you focus on developing its core features.

Features

- Complete serial-to-Wi-Fi wireless connectivity solution including network processor, media access controller and air interface
- Supports ad-hoc and infrastructure mode
- Wi-Fi security using WEP
- Serial interface supports DTE speeds to 230K bps
- Space efficient universal socket connectivity
- High performance processor runs ARP, DHCP client, DNS, FTP client, ICMP (ping), IP, POP3, SMTP, TCP and UDP protocols
- Two LED driver outputs for visual monitoring of link and activity
- Configuration and management via AT commands
- Flash memory to update firmware with the latest enhancements
- Developer's kit available for testing, programming and evaluation
- Two-year warranty

Universal Socket Benefits

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



Highlights

Applications. The SocketWireless Wi-Fi device server will wirelessly IP-enable any device to provide remote monitoring, control and configuration of any system. It is ideal for:

- Appliances
- ATM terminals
- Credit card and check verification systems
- Data collection
- Gas pumps
- Industrial and medical remote monitoring systems
- Point-of-sale terminals
- Remote diagnostics
- Remote metering
- Security systems
- Television set-top boxes
- Ticketing machines
- Vending/gaming machines

Serial-to-Wi-Fi Technology The SocketWireless Wi-Fi IP device server provides the powerful ability to IP-enable serial devices allowing more options for data acquisition, device management, and industrial control than would otherwise be available. The communications device integrates a processor, proprietary operating system, TCP/IP stack, and an 802.11b wireless network connection to provide a complete serial-to-Wi-Fi connectivity solution.

Quick-to-Market Solution. The complete, ready-to-integrate SocketWireless Wi-Fi device server is certified by the U.S. Federal Communications Commission (FCC). The FCC approval is portable across any solution for which the communications device is integrated, which means you can use the Multi-Tech license and bypass your own 802.11 regulatory product testing. This alone will save you valuable resources and dollars to allow you to focus on your product's core features, and accelerate your time-to-market.

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.

SocketWireless Wi-Fi Pin-Out. The SocketWireless Wi-Fi device server interfaces easily with existing products through a standard serial communication channel. The serial DTE channel is capable of transfer speeds to 230.4K bps and can be interfaced directly to a UART or microcontroller. The SocketWireless Wi-Fi device server also provides two LED driver outputs for visual monitoring of link and activity.

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

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.

Specifications

Wireless Specifications

Network Interface: IEEE 802.11b
Frequency Range: 2.400 to 2.484 GHz
Data Rate: 1, 2, 5.5, 11Mbps
Maximum Transmit Power: 16 dBm
Receiver Sensitivity: -82 dBm
Security: 64/128 bit WEP
Mode: Ad Hoc, Infrastructure
Antenna Connector: MMCX

Serial Interface

Data Format: Serial, asynchronous, 3.3V-level signals
Data Rate: Software selectable (1200 bps – 230K bps)

Power Requirements

3.3VDC or 5VDC

Power Usage

Typical – 400mA @ 3.3VDC, 240mA @ 5VDC

Network Protocol Support

ARP, DHCP client, DNS, FTP client, ICMP (ping), IP, POP3 client, SMTP client, TCP, & UDP protocols

Physical Description

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

Operating Environment

Temperature Range: -30° to +70° C

Approvals

Safety: UL 60950, cUL 60950, EN 60950,
AS/NZS 60950:2000
EMC: FCC Part 15 Subpart C, Canada, RSS-210,
EN 300 328, EN 301 489-17

Ordering Information

Product	Description	Region
MT800SWM	802.11b Device Server, 5V	Regional
MT800SWM-L	802.11b Device Server, 3.3V	Regional

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

Features and specifications are subject to change without notice.

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