

# SocketWireless® Wi-Fi®

## Embedded Serial-to-Wi-Fi Device Server



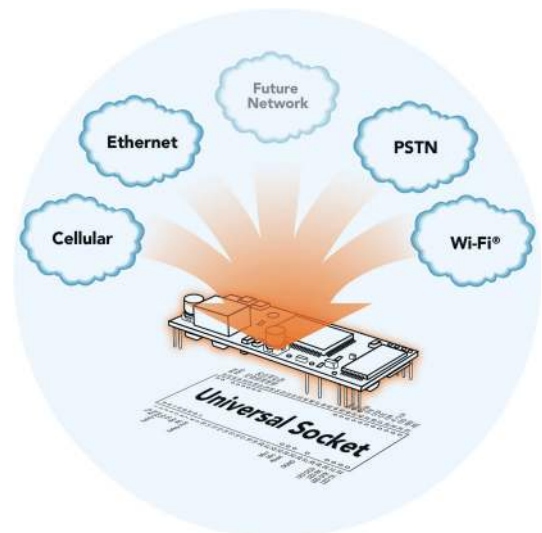
The SocketWireless® Wi-Fi® device server connects serial devices to an IP network via 802.11b/g wireless networking. It enables you to build wireless networking into virtually any device allowing for remote monitoring, control and configuration. The space efficient communications device (1" x 2.5") integrates Multi-Tech's Universal IP™ 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
- 802.11b/g compliant wireless networking
- Wi-Fi security using WEP, WPA and WPA2
- Universal Socket connectivity
- Intelligent Universal IP stack for enhanced M2M functionality
- Supports ad-hoc and infrastructure mode
- Serial interface supports DTE speeds to 921.6K bps
- UFL antenna connector
- 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:

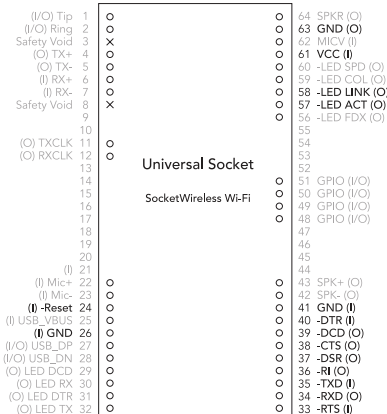
- Appliances
- Credit card and check verification systems
- Data collection
- Industrial and medical remote monitoring systems
- Point-of-sale terminals
- Remote metering
- Security systems
- Ticketing machines
- Vending/gaming machines

**Serial-to-Wi-Fi Technology** The SocketWireless Wi-Fi 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, Multi-Tech's Universal IP stack, and an 802.11b/g wireless network connection to provide a complete serial-to-Wi-Fi connectivity solution.

**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.

**Universal IP.** Multi-Tech's Universal IP consists of a common set of TCP/IP networking protocols and machine-to-machine (M2M) applications implemented using a standard AT command interface. Universal IP allows developers to write their host application one time while having the freedom to select from a growing number of Universal Socket communication devices.

**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 921.6K 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.



**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/g  
 Frequency Range: 2.400 to 2.484 GHz  
 Data Rate: Up to 54M bps  
 Maximum Transmit Power: 15 dBm  
 Receiver Sensitivity: -82 dBm  
 Security: 64/128 bit WEP, WPA-PSK, WPA2, & WPA2-PSK  
 Mode: Ad Hoc, Infrastructure  
 Antenna Connector: UFL

### Serial Interface

Data Format: Serial, asynchronous, 3.3V-level signals  
 Data Rate: Software selectable (1200 bps – 921.6K bps)

### Power Requirements

3.3VDC or 5VDC

### Power Usage

3.3VDC; 57mA idle, 180mA typical, 260mA maximum  
 5VDC; 56mA idle, 193mA typical, 260mA maximum

### IP Protocols Supported

ARP, DHCP client, DNS client, FTP client, ICMP (ping), POP3 client, SMTP client, TCP, & UDP client, Telnet server

### 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 60950-1, cUL 60950-1, EN 60950-1, IEC 60950-1  
 EMC: FCC Part 15 Subpart C, Canada, RSS-210, EN 300 328, EN 301 489-17  
 RoHS Compliant

## Ordering Information

Product	Description	Region
MT810SWM-IP	802.11b/g Device Server, 5V	Regional
MT810SWM-L-IP	802.11b/g 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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**World Headquarters**  
 Tel: (763) 785-3500  
 (800) 328-9717  
[www.multitech.com](http://www.multitech.com)

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

Multi-Tech Systems (EMEA)  
 France  
 Tel: +(33) 1 49 19 22 06

