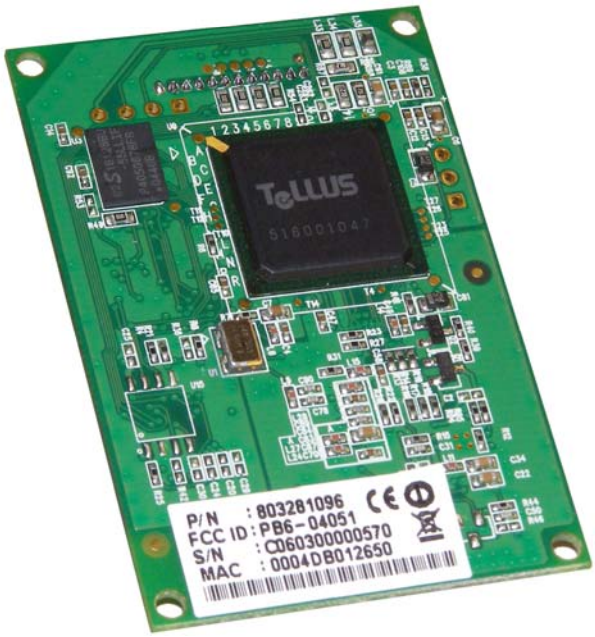
802.11B WLAN TO RS232 MODULE S103

Features

- Programmable baud rate (9600, 38400, 57600, 115200 bps)
- Full-duplex (serial data in / data out)
- Hardware flow control
- Provide 4K byte buffer
- Supports full mobility and seamless roaming from cell to cell
- Firmware upgrade through console port
- Easy set up via console or web configuration
- Two status-pins for showing connection status (connecting, connected, disconnected, command)
- Support Virtual Com driver and device-search utility
- Link to WLAN Access Point (referred as infrastructure mode)
- Link to another WLAN station (referred as “Ad-Hoc” mode)



Applications

- Remote Control and Wire Replacement in Industrial Systems -Wireless sensor networks
- Factory and Home Automation and Control - Heating and cooling, Utilities, Energy management, Security, Lighting
- Temperature and condition sensing, Assembly line management
- HID (Human Interface Devices) -Keyboards, Mice
- Home Gateways - Set-top boxes, Entertainment remotes
- Remote Measuring and Monitoring
- Security and Alarm System
- Public Utility Telemetry
- Vending and Ticketing
- General M2M Application

This miniature WLAN to RS232 module provides a cost effective, high performance Radio data link, between devices over a WLAN network. The S103 is compliant with the 802.11b protocol standard and can operate in Ad-Hoc or infrastructure mode, supporting 64/128-bits WEP security.

The modules are very simple to operate and offer low current consumption, allowing for extended battery life when used in mobile applications. Data can be supplied directly to or from a microcontroller, thus keeping the component count down and ensuring a low hardware cost.

Part Numbering

Part Number	Description
S103	WLAN to RS232 level, 12 pin header, w/ on board antenna, w/o LED

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Specifications

RS232 Features:
Baud Rate Options: 9600, 38400, 57600, 115200 bps
Data Length Options: 8 bits
Parity options: None
Stop Bits Options: 1 bit
Flow Control: Hardware or none
Serial UART Buffer: 256 bytes input, 256 bytes output

WLAN Radio Features:
Protocol Type: 802.11b standard compliant
Operating Range:
Open Environment: 1000 ft./300m
Office Environment: 100-330 ft./30-100m
Security:
WEP (Wired Equivalent Privacy) 64 and 128 bit encryption

Radio Characteristics:
Spread Spectrum Technology:
DSSS (Direct Sequence Spread Spectrum)
RF Range: 2.4 ~ 2.4835 GHz
Data Rate: 11 / 5.5 / 2 / 1 Mbps
Modulation: DBPSK for 1 Mbps, DQPSK for 2 Mbps, CCK for 5.5 / 11 Mbps
Operation channels:
US - 11, Europe - 13, France - 4, Spain - 2, Japan - 14
RF Power Output (Typical: +15 dBm)
Receive Sensitivity (Typical @BER 10E-5:
-83 dBm@11Mbps)

Power:
Power Supply: 3.3 / 5 VDC Regulated
Current: Tx 350mA (Max.), Rx 210mA, Power Saving Mode 80mA

Software:
Windows-based Driver with Multi-Link Virtual Com Driver
PC Utility: User setup and device-search software run on Windows 98 / Me / NT / 2000 / XP

Network Protocol:
UDP/IP, SNMP, HTTP, ARP, DHCP client

Mechanical:
Antenna: PCB on board or ipex connector for external antenna
Dimensions: 60 x 40 x 5.7 mm

Environmental:
Temperature:
Operating: 0 to +55 °C / +32 to +131 °F
Storage: -20 to +65 °C / -4 to +149 °F
Relative Humidity: 95% (non-condensing)

EMC Certificate:
U.S.A.: FCC Part 15 Subpart C
CE: ETSI EN 300 328, EN 301 489-1/17, EN 55022, EN 61000, EN 50371

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