

# RS-WC-301 PRODUCT BRIEF



RS-WC-301

## RS-WC-301: ADVANCED WI-FI FOR FOR M2M APPLICATIONS

The RS-WC-201 WiSeConnect™ module is a fully integrated 802.11 a/b/g/n module with advanced features for M2M, industrial, medical, enterprise and IOT (Internet of Things) applications. Powered with Wi-Fi Direct™, it can directly communicate with smartphones and tablet PCs without an Access Point based infrastructure. Integrated with Enterprise Security as well as TCP/IP and WLAN stacks, it can be designed quickly into any Host platform for secure and standards based Wi-Fi connectivity. The module also supports Access Point mode and can host data from a variety of sources such as sensors etc. in the module's in-built web server. Requiring no external BOM , the module integrates a MAC, Baseband Processor, RF Transceiver with power amplifier, a frequency reference and an antenna. The module comes with a comprehensive API set to make software integration quick and seamless. Based on Redpine Signals' 802.11n SoC RS9110, it is designed to provide wireless connectivity to devices that have a UART, SPI or USB interface. The module supports both 2.4 GHz and 5 GHz channels.



## Features

- 802.11a/b/g/n , operation over 2.4 and 5 Ghz.
- Wi-Fi Direct™ , Access Point and Client mode
- Enterprise Security - EAP-TLS, EAP-TTLS, EAP-FAST, PEAP-MSCHAP-V2
- Integrated TCP/IP stack, HTTP Server/Client, DHCP, DNS
- Over the air Firmware Upgrade
- Integrated antenna and option for external antenna
- Ultra low power operation with power save modes
- Single supply 3.1 to 3.6 V operation

## Applications

- Consumer - Wi-Fi Connectivity for home appliances
- Enterprise - Wireless printers, Security cameras, Point of Sale terminals
- Industrial - M2M communication, industrial monitoring and control, data logging and streaming
- Medical - Patient monitoring, medical instrumentation with secure wireless connectivity

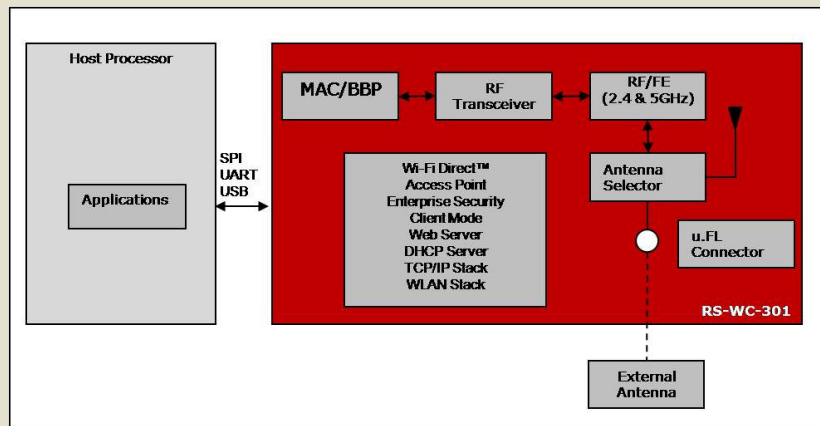
## Specifications

Network Standard Support	IEEE 802.11a/b/g/n
Frequency band	2.400 - 2.500 GHz, 4.900 - 5.850 GHz
Data Rates	802.11n: 6.5, 13, 19.5, 26, 39, 52, 58.5 Mbps 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps
Modulation Techniques	OFDM with BPSK, QPSK, 16-QAM, and 64-QAM 802.11b with CCK and DSSS
Connectivity	Wi-Fi Direct mode, Access Point mode and Client mode
Wireless Security	WPA/WPA2-Enterprise, WPA/WPA2-PSK, WPS
Networking protocols	TCP, UDP, DHCP, ARP, IGMP, DNS client
HTTP Server	Integrated Web Server for browser based connectivity
Host Interfaces	SPI, USB, UART( AT Commands supported )
Data throughput	Up to 5.5 Mbps in SPI and USB modes, 90 kbps in UART mode at a benchmark baud rate of 115200 bps
Operating Temperature	-40°C to +85°C
Supply Voltage	3.1 - 3.6 V
Dimensions	40mm x 22mm

## Evaluation Package

Redpine Signals provides a comprehensive evaluation package that includes an evaluation board, software, driver source code for the Host interface and documentation.

## RS-WC-301 SYSTEM ARCHITECTURE



For additional information, please contact Sales at Redpine Signals, Inc.:

Redpine Signals, Inc. • 2107 North First Street • Suite 680 • San Jose, CA 95131

Phone: +1 408 748 3385 • Email: [sales@redpinesignals.com](mailto:sales@redpinesignals.com)

[www.redpinesignals.com](http://www.redpinesignals.com)

Redpine Signals, Inc. reserves the right to make changes to the product(s) or information contained herein without notice. No Liability is assumed as a result of their use or application. Redpine, Redpine Signals, the Redpine logo, Driving Wireless Convergence, WiSeConnect and Lite-Fi are trademarks of Redpine Signals, Inc. All other company names, products and logos are registered trademarks of their respective companies.

© Copyright 2012 Redpine Signals, Inc. All Rights Reserved.

**WiSeConnect™**

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [WiFi Modules - 802.11 category](#):*

*Click to view products by [Silicon Labs manufacturer](#):*

Other Similar products are found below :

[KBPC10/15/2506WP](#) [WIFI-RT5392-SB-R10](#) [SX-PCEAN2C-SP](#) [849WM520100E](#) [WIFI-AT2350](#) [7265.NGWG.SW](#) [HDG204-DN-3](#) [FXX-3061-MIX](#) [EMIO-1533-00A2](#) [7265.NGWWB.W](#) [PPC-WL-KIT02-R11](#) [RC-CC2640-B](#) [HLK-7688A](#) [E70-433T14S](#) [WH-NB73-BA](#) [NF-02-PA](#) [EAR00364](#) [ATSAMW25H18-MR210PB1961](#) [3168.NGWG](#) [MY-WF003U](#) [AX210.NGWG.NV](#) [ESP-15F32Mbit](#) [ESP32-S32Mb](#) [TG-01M](#) [ESP-13](#) [ESP-01F-2M](#) [ESP-01E-2M](#) [ESP-12S-8285-2M](#) [ESP-20](#) [ESP32-SL](#) [ESP-12K-PSRAM](#) [ESP-12K](#) [ESP-12K-PSRAM-IPEX](#) [ESP-12H](#) [BW18](#) [BW12-16Mb](#) [BW14](#) [BW15](#) [BW16](#) [TG-12F](#) [SIM7600CE-L1S](#) [CB3S\(tjrl\)](#) [CB3S\(hvk9\)](#) [CB3S\(qh6\)](#) [WB2S\(csyd\)](#) [WB3S\(ppty\)](#) [WB3S\(h238\)](#) [WB3S\(uvmz\)](#) [1005869](#) [1012](#)