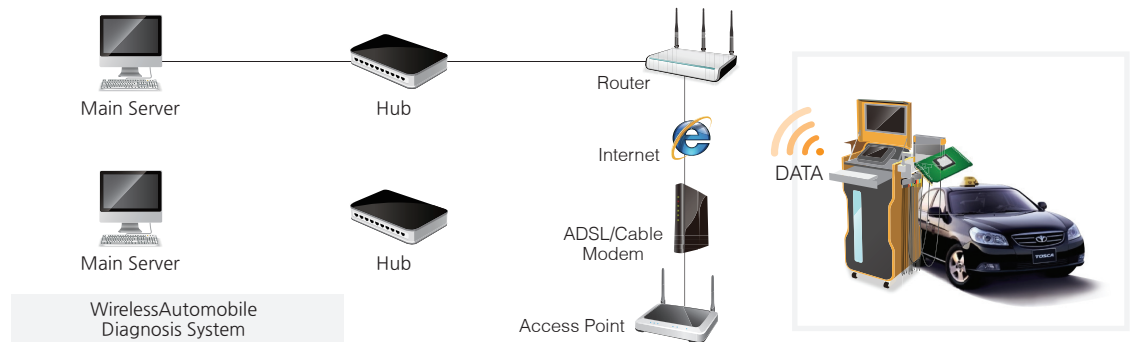Data Sheet

CSW-M83 | Embedded Serial WLAN Converter

Overview

CSW-M83 is a wireless LAN converter for serial devices. This modular type product helps your product add wireless network connectivity simply. Applying this product, not only you can reduce cost and risk, but also you can shorten development time to add the wireless LAN network capability. Because a USB wireless LAN dongle is installed on outside of the product, it makes you free from RF approvals.
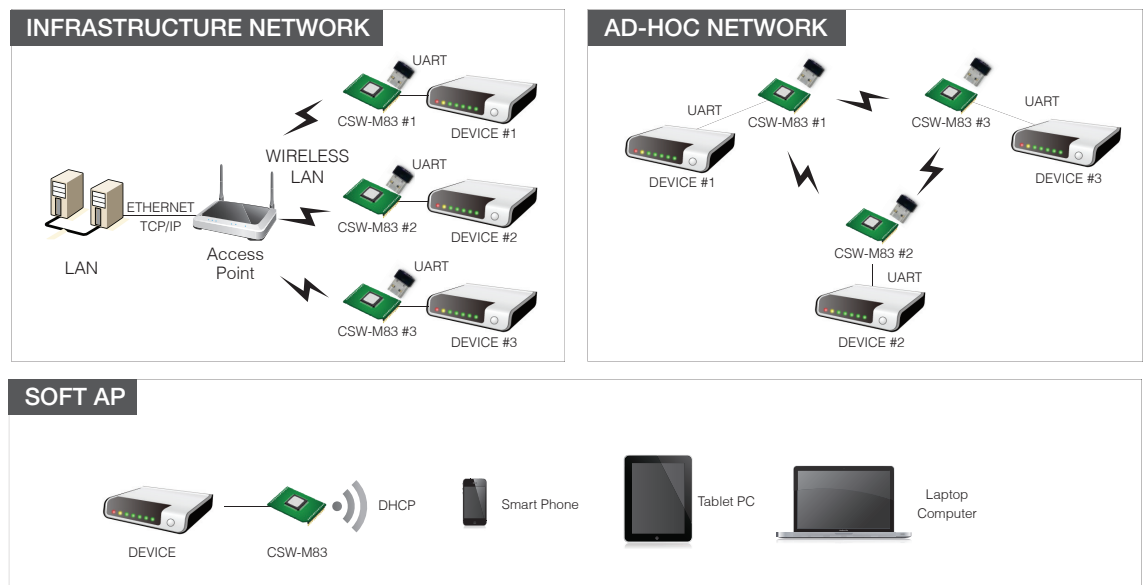
Features

- 1 x UART(3.3V level)
- Provides USB port for IEEE 802.11b/g wireless LAN adapter
- Support Ralink RT3070 or RT5370 chipset USB wireless LAN adapters
- IPv4 / IPv6 dual stack
- Stateless/Stateful(DHCPv6) IPv6 auto configuration
- Soft AP (setting and connection through a smart phone or laptop without an AP available)
- Setting up main parameters (IP, SSID and security functions related to WiFi) on the Web
- RSSI(Received Signal Strength Indication) mode
- WPA Enterprise (EAP-TLS, EAP-TTLS, PEAP)
- Security options(IP Filtering, Password, WEP, WPA-PSK, WPA2-PSK)
- Separator settings for packet fragmentation

Application

System Diagram

Specifications

Serial Interface	
Serial Interface	1 x UART, 3.3V level with 5V tolerant input
	RXD, TXD, RTS, CTS, GND
Connector	1x12 2mm pitch header x 2

Serial Port Properties	
Data Rate	300bps ~ 230,400bps
Data Bits	5, 6, 7, 8 bits
Parity	None, Even, Odd, Mark, Space
Stop Bit	1, 2
Flow Control	None, RTS/CTS, Xon/Xoff

Network Physical Interface	
Wireless LAN Interface	IEEE802.11b/g wireless LAN
	Ralink RT3070/5370 USB WLAN dongle required

Software Functions	
Protocols	IPv6: IPv4/IPv6 dual stack, ICMPv6/TCPv6/UDPv6
	TCP, UDP, IP, ICMP, ARP, TELNET
	DHCP, DNS, DDNS
	Telnet COM Port Control Option(RFC 2217)
Security	WEP, WPA-PSK, WPA2-PSK
	WPA-Enterprise: EAP-TLS, EAP-TTLS, PEAP
	IP & MAC filtering - Restrict host or network
	Password for Configuring
Communication Mode	TCP Server(T2S)
	TCP Client(COD)
	TCP Server/Client with AT command(ATC) - Patent
	UDP Mode(U2S)
Additional Functions	Debug Function
	Sending MAC address Option
	Factory Reset
	RSSI(Received Signal Strength Indication) Mode

Indicators (LEDs)	
Power	Red
Status	Yellow, The current status

Management	
ezManager	Configuration and Monitoring through Network and Serial
Telnet	Telnet Login
AT Command	Configuring in ATC mode - Patent

Supplenetary Software	
ezManager	Configuration Tool for Windows
ezVSP	Serial to Network Virtual Driver for Windows
ezTerm	Simple TCP/IP Communication Test Tool

Dimension	
Size	40.0mm x 28.0mm

Operating Environment	
Input Voltage	DC 5±0.5V
Power Consumption	115mA Typical
Operating Temperature	-20℃ ~ +70℃
Storage Temperature	-40℃ ~ +85℃