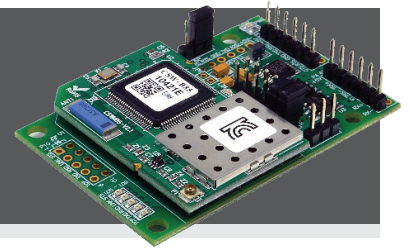


Data Sheet

# CSW-B85 | Serial to WLAN Converter



## Overview

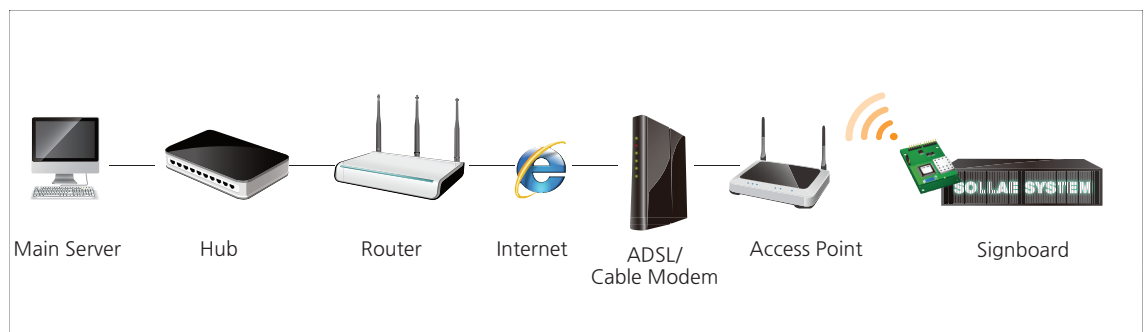
CSW-B85 is an embedded serial to WiFi board which is integrated with CSW-M85, serial to WiFi module. It enables you to add wireless networking capabilities to your industrial equipment via RS232, RS422, RS485 and 3.3V UART. So by applying this serial to WiFi board, you can control and monitor your serial devices from anywhere in the world over WiFi. As well as basic functions, this WiFi board contains more developed features to broaden its application area.

CSW-B85 comes preloaded with Wireless RSSI and Soft AP that make it more convenient and easier for you to manage your products with mobile devices such as smart phones, tablet PCs and laptops where WiFi network is inaccessible. Also, CSW-B85 is embedded with the IPv4/IPv6 dual stacks so that it can help you take the necessary steps to handle a transition to IPv6. CSW-B85 is especially suitable for where maximum security is demanded thanks to an enhanced wireless encryption protocol(WPA-Enterprise). With infrastructure and Ad-hoc network provided, this serial to WiFi board can be used for various wireless applications Credit Payment Approval.

## Features

- 1 x RS232/RS422/RS485
- built-in IEEE 802.11 b/g wireless LAN module
- built-in chip antenna and a U.FL socket for an external antenna
- 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
- ESD protection circuit

## Application



# Specifications

<b>Serial Interface</b>	
<b>Serial Interface</b>	1 x UART, 3.3V level with 5V tolerant input (RXD, TXD, RTS, CTS, GND)
	RS232(RXD, TXD, RTS, CTS, GND)
	RS485(TRX+, TRX-, GND)
	RS422(TX+, TX-, TX+, RX-, GND)
<b>Connector</b>	2.5mm Header
<b>Serial Port Properties</b>	
<b>Data Rate</b>	300bps ~ 230,400bps
<b>Data Bits</b>	5, 6, 7, 8 bits
<b>Parity</b>	None, Even Odd, Mark, Space
<b>Stop Bit</b>	1, 2
<b>Flow Control</b>	None, RTS/CTS, Xon/Xoff
<b>Network Physical Interface</b>	
<b>Wireless LAN Interface</b>	IEEE802.11b/g wireless LAN
	Chip Antenna/U.FL Connector(Selectable)
<b>Software Functions</b>	
<b>Protocols</b>	IPv6: IPv4/IPv6 dual stack, ICMPv6/TCPv6/UDPv6
	TCP, UDP, IP, ICMP, ARP, TELNET
	DHCP, DNS, DDNS
	Telnet COM Port Control Option(RFC 2217)
<b>Security</b>	WEP, WPA-PSK, WPA2-PSK
	WPA-Enterprise: EAP-TLS, EAP-TTLS, PEAP
	IP & MAC filtering - Restrict host or network
	Password for Configuring
<b>Communication Mode</b>	TCP Server(T2S)
	TCP Client(COD)
	TCP Server/Client with AT command(ATC) - Patent
	UDP Mode(U2S)
<b>Additional Functions</b>	Debug Function
	Sending MAC address Option
	Factory Reset
	RSSI(Received Signal Strength Indication) Mode
<b>Indicators (LEDs)</b>	
<b>Normal Operation</b>	Status, LAN Link, LAN RXD, LAN TXD, TCP
<b>RSSI Mode</b>	Level 4, Level 3, Level 2, Level 1, TCP
<b>Management</b>	
<b>ezManager</b>	Configuration and Monitoring through Network and Serial
<b>Telnet</b>	Telnet Login
<b>AT Command</b>	Configuring in ATC mode - Patent
<b>Supplementary Software</b>	
<b>ezManager</b>	Configuration Tool for Windows
<b>ezVSP</b>	Serial to Network Virtual Driver for Windows
<b>ezTerm</b>	Simple TCP/IP Communication Test Tool
<b>Dimension</b>	
<b>Size</b>	60.0mm x 42.0mm
<b>Operating Environment</b>	
<b>Input Voltage</b>	DC 5V (±0.5V)
<b>Power Consumption</b>	260mA typical
<b>Operating Temperature</b>	-10°C ~ +70°C
<b>Storage Temperature</b>	-40°C ~ +85°C