

Data Sheet

CSW-B85 | Serial to WLAN Converter



Overview

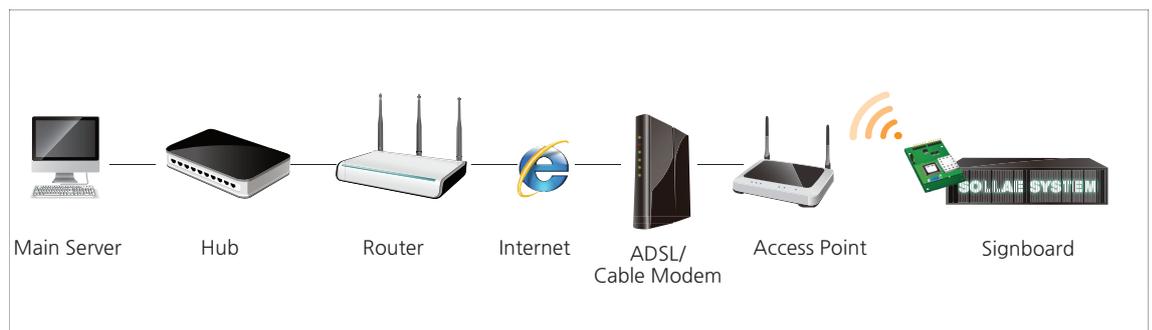
CSW-B85 is an embedded serial to WiFi board which is integrated with CSW-M85, serial to WiFi module. It enables you to add wireless networking capabilities to your industrial equipment via RS232, RS422, RS485 and 3.3V UART. So by applying this serial to WiFi board, you can control and monitor your serial 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

Serial Interface	
Serial Interface	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)
Connector	2.5mm Header
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
	Chip Antenna/U.FL Connector(Selectable)
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)	
Normal Operation	Status, LAN Link, LAN RXD, LAN TXD, TCP
RSSI Mode	Level 4, Level 3, Level 2, Level 1, TCP
Management	
ezManager	Configuration and Monitoring through Network and Serial
Telnet	Telnet Login
AT Command	Configuring in ATC mode - Patent
Supplementary Software	
ezManager	Configuration Tool for Windows
ezVSP	Serial to Network Virtual Driver for Windows
ezTerm	Simple TCP/IP Communication Test Tool
Dimension	
Size	60.0mm x 42.0mm
Operating Environment	
Input Voltage	DC 5V (±0.5V)
Power Consumption	260mA typical
Operating Temperature	-10°C ~ +70°C
Storage Temperature	-40°C ~ +85°C