"Device-Wireless" Networking Access

Wireless Serial Server - 802.11g/b

■■ **SW5002**

RoHS compliant

- Support dual port DIN-Rail mounting model
- Metal housing with IP50 standard
- 15KV ESD protection for serial ports
- IEEE 802.11g 54Mbps wireless network connectivity
- Support UDP, TCP server and client protocols for Virtual COM and Tunneling mode
- Support RS232/RS485/RS422 serial mode by software selectable
- Provide special isolated model for photo-couple RS-485 Interface
- Configurable via console, telnet, built-in web server and Windows-based utilities
- Optional standard 2.4GHz High-gain antenna
- Upgradeable firmware via wired or wireless network

The Wireless Industrial Serial Server SW5002 is a gateway between TCP/IP via wireless and RS232/RS485/RS422 communications. It allows almost any serial device to be connected to a new or existing wireless network. SW5002 offers wireless network interface (IEEE802.11g, 54Mbps) and two selectable serial ports. The new isolation model –SW5002-Sis(TB) has two photo-couple interfaces for RS-485 signaling connectivity.

By encapsulating serial data and transporting it over Wireless LAN; or for security requirements by WEP or WPA encryption. SW5002 offers full-duplex, bi-directional data transmission transparent between serial port and Wireless LAN.

In industrial and manufacturing automation fields, SW5002 is used for field devices to connect Wireless LAN through TCP/IP protocol directly. It is also specially designed for conjunction with PLCs, HMIs, Barcode Scanners, Data Terminals, Electronic Kanbans, Shop Floor Control Systems, and Pick-to-Light systems.

Terminal Server (Main Control Program Executed in this unit) makes most use of Wireless LAN (or Ethernet) connectivity to drive serial devices. It transforms whatever serial data received to TCP/UDP format then enables a host computer to drive the serial devices through the Wireless LAN and Ethernet.

Atop Virtual Com software provides existing Windows based applications to access serial devices by mapping to remote serial server over Wireless LAN (or Ethernet).

Flexible configuration options enable this unit to be setup over TCP/IP by Telnet, web browser, or other utility. Packed in a rugged Metal housing with DIN Rail-mountable case and 9~30VDC power input range by Terminal Block or DC-Jack connector, SW5002 is ideal for almost any industrial and manufacturing automation.

atop Technologies

Wireless Serial Server- 802.11g/b → SW5002

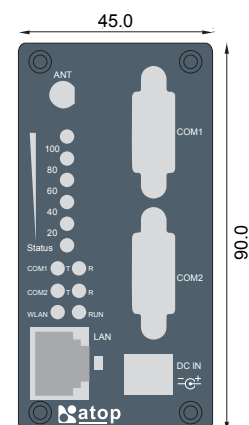| Specifications	
CPU	32-bit RISC Processor with MMU
Flash Memory	10MB (2MB for Bootloader)
SDRAM	32 MBytes
Wireless LAN	Compliance for IEEE802.11g/b
	WEP 64-bit/128-bit data encryption, WPA-PSK compatible (TKIP/AES Encryption)
	Mobile for Fast Roaming
	Modulation Type: CCK, DQPSK, DBPSK, OFDM (@11g)
	Tx Power 11b: 15dBm /11g: 14dBm
	Rx Sensitivity: -66 dBm@54 Mbps, -80 dBm@11Mbps
	Transmission Rate: 54 Mbps (max.) with auto fallback
	Transmission Distance: Up to 300 meters (@12 Mbps, in open areas)
	Antenna Connector: Reverse SMA
	Topologies: Infrastructure, Ad-Hoc
Ethernet	10/100M Auto-negotiation
	Protection: Built-in 1.5 KV magnetic isolation
	Configuration with Telnet protocol
Serial Port	SW5002-WgN1(DB)/(TB)
	Support RS232/RS485/RS422 Software Selectable
	Baud Rate: 1200bps~921Kbps
	SW5002-WgN1Sis(TB)
	Support RS485/RS422 Software Selectable
	Baud Rate: 1200bps~230Kbps (include Photo-couple)
	Parity Check: None, Odd, Even, Mark, Space
	Data Length: 7/8 Bit
	Stop Bit: 1/2
	Flow Control: None, Software: Xon/Xoff, Hardware: RTS/CTS
	Protection: Terminal block or DB9 connector with 12KV ESD
Software	Protocols: ICMP, IP, TCP, UDP, DHCP Client, Telnet, DNS, SNMP, HTTP, SMTP, SNTP
	Utilities for Windows 98/2000/XP/2003, Virtual COM for Windows 98/2000/XP/2003
Configuration	Web browser, Telnet Console, Windows Utility
Power Requirement	Input: DC 9~30V (Terminal Block or DC-Jack Connector)
	Consumption: Max. 4.5W (Tx Mode)
Dimension	45mm x 90mm x 75mm (W x H x D)
Environment	Operating: 0℃~60℃ (32~140℉), 5~95% RH
	Storage: -20~85℃ (-4~185℉), 5~95%RH
Regulatory Approvals	EMC: FCC Class A, CE Class A, Safety: UL

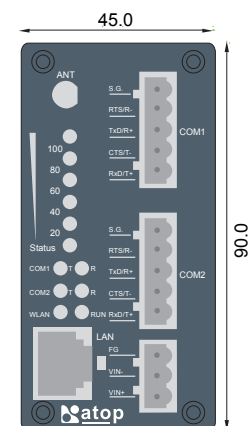| Ordering information (by model)	
SW5002-WgN1(DB)	Dual port, IEEE802.11g, D-type COM Port & DC-jack Power Connector
SW5002-WgN1(TB)	Dual port, IEEE802.11g, Terminal Block COM Port & Power Connector
SW5002-WgN1Sis(TB)	Dual port, IEEE802.11g, Isolated Terminal Block COM Port (RS485/RS422 only) & Power Connector

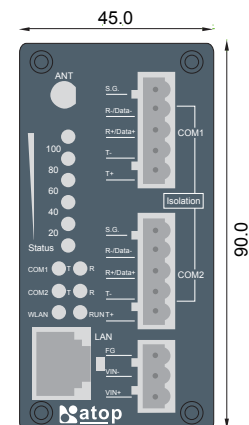| Optional Accessories	
US315-12 (US)	US plug, AC100~240V to DC12V, Terminal block for SW5002-WgN1 / Sis(TB)
USE315-12 (EU)	EU plug, AC100~240V to DC12V, Terminal block for SW5002-WgN1 / Sis(TB)
HG055	5.5dBi antenna, SMA (R) Female connector with 180cm cable
1A25F(US)	US plug, AC100~240V to DC12V, DC Jack lockable for SW5002-WgN1(DB)
1A25F(EU)	EU plug, AC100~240V to DC12V, DC Jack lockable for SW5002-WgN1(DB)

SW5002-WgN1(DB)

SW5002-WgN1(TB)

SW5002-WgN1Sis(TB)