

# "Device-Wireless" Networking Access



RoHS compliant

## Wireless Serial Server - 802.11g/b

■ ■ SW5001

- DIN-Rail metal housing with IP50 standard
- One serial port, RS-232/RS-485/RS-422 software selectable
- 15KV ESD protection for serial port
- 802.11g/b with WPA2-PSK security
- 10/100M Ethernet port for configuration and network redundancy
- Support UDP, TCP server and Client protocols for Virtual COM mode and Tunneling mode interface
- Configurable via Console, Telnet, built-in Web server and Windows-based utilities
- Built-in standard High-gain 4dBi antenna

The Wireless Industrial Serial Server SW5001 is a gateway between TCP/IP via wireless and RS-232/RS-485/RS-422 communications. It allows almost any serial device to be connected to a new or existing wireless network. SW5001 offers wireless network interface (IEEE802.11g/b, 54Mbps) and one serial port.

By encapsulating serial data and transporting it over Wireless LAN; or for security requirements by WEP or WPA2-PSK encryption. SW5001 offers full-duplex, bi-directional data transmission transparent between serial port and Wireless LAN.

In industrial and manufacturing automation fields, SW5001 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 Ethernet (or Wireless LAN) 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 Ethernet (or Wireless LAN).

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, SW5001 is ideal for almost any industrial and manufacturing automation.

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## Specifications

<b>CPU</b>	IDT RISC Processor with MMU
<b>Flash Memory</b>	10 MB (2MB for Bootloader)
<b>SDRAM</b>	32 MBytes
<b>Wireless LAN</b>	Compliance for IEEE802.11g/b WEP 64-bit/128-bit data encryption, WPA2-PSK compatible (TKIP/AES Encryption) Modulation Type: CCK, DQPSK, DBPSK, OFDM (11g) Tx Power 11b: 15dBm+5dBi/11g: 14dBm+5dBi 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) Topologies: Infrastructure, Ad-Hoc
<b>Ethernet</b>	10/100M Auto-detection (for Redundancy & Configuration) Protection: Built-in 1.5 KV magnetic isolation Configuration with Telnet protocol
<b>Serial Communication</b>	Support RS-232/485/422 & software selection Baud Rate: 1200bps~921Kbps 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 15KV ESD
<b>Software</b>	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
<b>Configuration</b>	Web browser, Telnet Console, Windows Utility
<b>Power Requirement</b>	Input: DC 9~30V, Consumption: Max. 4.5W (Tx Mode)
<b>Dimension</b>	45mm x 91mm x 80mm (W x H x D)
<b>Environment</b>	Operating: 0°C~60°C (32~140°F), 5~95% RH Storage: -20~70°C (-4~185°F), 5~95%RH
<b>Regulatory Approvals</b>	EMC: FCC Class A, CE Class A, Safety: UL

## Ordering information (by model)

**SW5001-WgN1** Single-port IEEE802.11g wireless serial server with 4dBi antenna

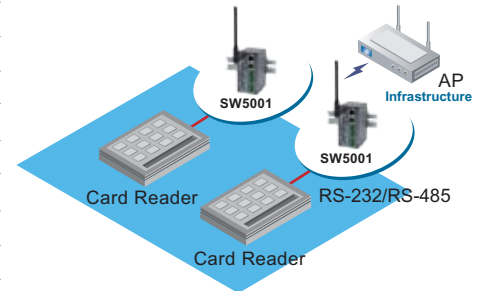
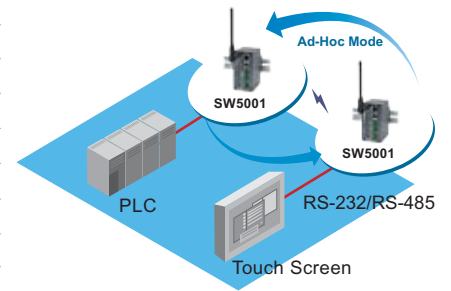
## Optional Accessories

**US315-12 (US)** Power adapter (US), AC100~240V/DC 12V 1.25A with Terminal block for

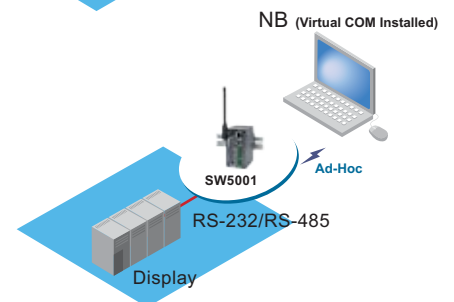
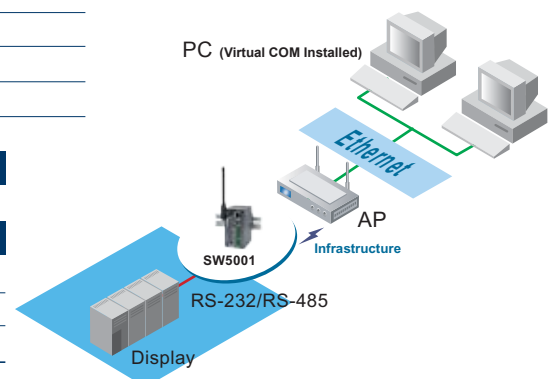
**USE315-12 (EU)** Power adapter (EU), AC100~240V/DC 12V 1.25A with Terminal block for

**HG055** 5.5dBi antenna, SMA (R) female connector with 180cm cable

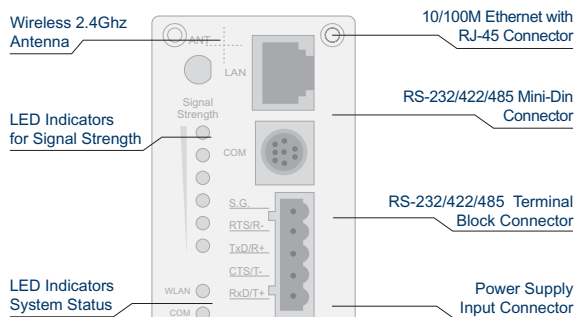
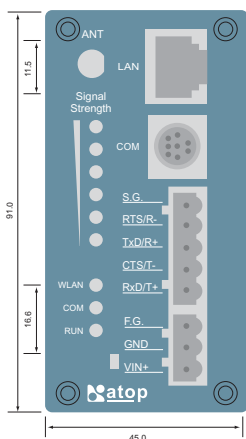
## Tunneling Mode (with TCP or UDP protocol)



## Virtual COM Mode (with TCP protocol)



## SW5001 Front Panel



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