The Wireless Industrial Serial Server SW5001 is a gateway between TCP/IP via wireless and RS-232/422/485 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.
## Wireless Serial Server - 802.11g/b

### Specifications

#### Ethernet
- **Compliance**: IEEE802.3
- **Port**: 1-port
- **Transmission Rate**: 10/100Mbps Auto-detection
- **Connector**: RJ-45
- **Auto MDI/MDI-X**: No

#### WLAN
- **Compliance**: IEEE802.11g/b
- **WEP**: 64-bit / 128-bit data encryption
- **WPA**: WPA/WPA2-PSK compatible (Supported TKIP / AES encryption)
- **Modulation**: CCK, DQPSK, DBPSK, OFDM (11g)
- **Tx Power**: 11b: 15dBm / 11g: 14dBm
- **Rx Sensitivity**: -66dBm@54Mbps / -80dBm@11Mbps
- **Transmission Rate**: 54Mbps (max) with auto fallback
- **Transmission Distance**: Up to 300 meters (@12Mbps in open areas)
- **Topologies**: Infrastructure, Ad-Hoc
- **Antenna connector**: Reverse SMA

#### Link Mode
- **TCP Server**: Up to 4 connections or Virtual Com mode
- **TCP Client**: Up to 2 destinations
- **UDP**: Up to 4 destinations

#### Serial
- **Interface**: RS-232/422/485 software selectable
- **Ports**: 1-port
- **Baud Rate**: 110bps~921Kbps
- **Parity**: None, Odd, Even, Mark, Space
- **Data Bits**: 5, 6, 7, 8
- **Stop Bits**: 1, 2
- **Flow Control**: None, Software: Xon/Xoff, Hardware: RTS/CTS
- **Connector**: 5-pin terminal block / 8-pin Mini DIN
- **Protection**: 15KV ESD

#### Power
- **Input**: DC 9~30V
- **Consumption**: Max. 4.5 W (Tx Mode)

#### Environment
- **Operating**: 0°C ~ 65°C (32°F ~ 149°F)
- **Storage**: -40°C ~ 85°C (-40°F ~ 185°F), 5 ~ 95%RH

#### Dimension
- **W x H x D**: 45mm x 91mm x 80mm

#### MTBF (Hour)
- **Preceding**: 59914.02

#### Software
- **Configuration**: Web Page / Telnet / Serial console / Windows utility
- **Virtual Com / DeviceView / Serial Manager**: Windows & Linux port redirection software
- **Support Protocol**: ICMP, TCP(UDP) / IP, DHCP client, DNS, SNMP, NTP, SMTP, HTTP, Telnet

#### Optional Accessories
- **Antenna**: HG055: 5.5dBi reverse SMA connector with 180cm cable
- **RF Cable**: HG090: 9dBi reverse SMA connector with 150cm cable
- **Power Adapter**: HG-C150AN: SMA(R) to N-male 150cm cable
- **HG-C600N**: N-male to N-female 600cm cable

#### Ordering Information
- **1P1SW5001WG001G**: IEEE802.11g 1-port software selectable RS-232/422/485(TB)
- **SW5001-WgN1**: Wireless serial server

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**Datasheet**

**Wireless Serial Server- 802.11g/b**

**SW5001**