Device Networking Access

Wireless Serial Server - 802.11g/b

RoHS compliant

- Metal housing with IP50 standard
- DIN-Rail mounting
- 15KV ESD protection for serial ports
- IEEE 802.11g/b 54Mbps wireless network connectivity
- Support UDP, TCP server and client protocols for Virtual COM and Tunneling mode
- Support RS-232/422/485 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 RS-232/422/485 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 isolated model - SW5002-5Isol(T/B) 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 System, 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 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.
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Specifications

System
CPU: 32-bit 8051 microcontroller
Flash: 24 kB, 32 kB (for broadcast)
RAM: 32 kB, 64 kB

Ethernet
Compliance: IEEE 802.3
Port: 1 (RJ-45)

Transceiver Rate: 2.4GHz Auto-detection

Auto MDI/MDX: Yes

WLAN
Compliance: IEEE 802.11g/b
WEP: 64-bit WEP, 128-bit WEP encryption
WPS: WPA/WPA2-PSK compatible (Supports TKIP/AES encryption)
Modulation: DSSS, DCH, DMT, OFDM, OQPSK (14.3 Mbps)
Tx Power: 11: 15dBm, 15: 5.94dBm
Rx Sensitivity: -94dBm (WEP), -87.6dBm (WPA)
Transmission Rate: 16 Mbps (max.), 8 Mbps (best full link)
Transceiver Distance: Up to 300 meters (62.55 Mbps in open area)
Topologies: Infrastructure, Ad-hoc

Antenna connector: Reverse SMA
Link Mode: TCP, UDP
TCP Server: Up to 4 connections over Virtual Comm.
TCP Client: Up to 4 destinations
UDP: Up to 4 destinations

Serial Interface: RS-232/422/485 software selectable
-802G/2Wg/2/SS(SB)
-802G/2Wg/2/SD(SB)

Interface: RS-422/485 software selectable
Ports: 2 (DIN)
Speed Rate: 2400 - 2 Mbps
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

Power
Input: DC 9 - 16V
Consumption: Max. 4.5W (5 x Mode)

Environment
Operating: 0°C - 40°C (32°F - 104°F)
Storage: -40°C - 70°C (140°F - 158°F), -5 - 25°C (23°F - 77°F)

Dimensions: 45mm x 50mm x 89mm

Software
Configuration: WebPage / Terminal / Serial console / Windows utility

Virtual COM: Windows & Linux port redirection software

Support Protocol: ICMP, TCP/UDP, IP, DNS, HTTP, SMTP, FTP, Telnet

Data Transmissions

SW5002-0Wgh[S(T)]: RS-232/485 2-way software selectable RS-232/422/485(SB) terminal serial server with DC jack available power connector

SW5002-0Wgh[M(T)]: RS-232/485 2-way software selectable RS-232/422/485(Terminal Block) wireless serial server

SW5002-0Wgh[S(B)]: RS-232/485 2-way software selectable RS-232/422/485(Terminal Block) full诗to dataconial server

Optional Accessories

Antenna: MO95S: 5.5dBi dipole SMA connector with 35cm cable
MO965: 8dBi panel SMA connector with 35cm cable

IK Cable: HD-COMAN SMA(T) to N male 3.5mm cable
HD-COMAN N male to N female 65cm cable

Power Adapter: SW5002-Wgh1S(TB) / SW5002-Wgh1S(B)
USB15.12 US/EU 4C100 - 14V DC 12V
5-filin pin terminal block