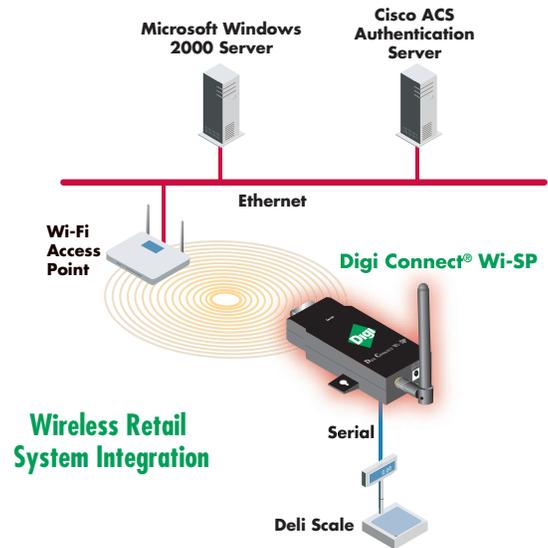# Digi Connect® Wi-SP

Wireless Device Server

The industry's first secure 802.11b wireless device server delivers leading network-to-serial connectivity and strong WPA2/802.11i security.

Microsoft Windows 2000 Server

Cisco ACS Authentication Server

Ethernet

Wi-Fi Access Point

Digi Connect® Wi-SP

Wireless Retail System Integration

Serial

Deli Scale

Features/Benefits

- **Compact enclosure design with integrated mounting tabs**

- **Fully switch-selectable RS-232/422/485 high-speed serial interface**

- **Flexible 9-30VDC power input**

- **Wireless 802.11b network interface with data rates up to 11 Mbps**

- **Industry's first secure wireless device server solution supporting enterprise-class WPA2/802.11i security**

- **Easy-to-use Digi plug-and-play firmware offers complete serial-to-network connectivty and unique product customization flexibility**

- **Strong SSL/TLS encryption with NIST-certified AES encryption for security sensitive environments**

- **Digi's patented RealPort® technology for COM/TTY port redirection and control**

Overview

The introduction of wireless technology into the rapidly emerging world of fully networked electronic devices creates a new dimension of device and software collaboration that complements existing wired infrastructures.

Built on Digi's leading 32-bit NET+ARM technology, the Digi Connect Wi-SP wireless device server delivers a true plug-and-play device networking solution that combines the benefits of secure wireless networking technology with proven serial port connectivity. It is the ideal choice in retail, warehouse, healthcare and medical applications, allowing you to respond immediately to the ever-changing requirements and challenges that are crucial to the success of your business. For example, you may dynamically change and improve the layout of an existing retail or factory floor without the need for the time-consuming and costly installation and without the inflexibility of wired network infrastructures.

Whenever sensitive and business-critical data is involved, network security is a key requirement. The significant benefits of wireless technology often come with potential risks, and choosing the right product provides you with peace-of-mind and a competitive edge. The Digi Connect Wi-SP is the industry's first wireless device server to provide enterprise-class wireless security through a complete set of strong encryption and authentication services that are compliant with the WPA2 and 802.11i standards.

The Digi Connect Wi-SP also offers unique features such as an easy user interface, product customization options, intelligent remote management and monitoring capabilities through the Digi Connectware® Manager device management software, and standard management interfaces including SNMP.

Features/Specifications

HARDWARE

- 32-bit NET+ARM high-performance RISC processor (NS7520 55 MHz)
- 4 MB Flash and 16 MB RAM
- Switch-selectable RS-232/422/485 interface (DB-9M)
  - Throughput up to 230,400 bps
  - 7/8 data bits
  - 1/1.5/2 stop bits
  - None/even/odd parity
  - Full signal support with software/hardware flow control
- 802.11b wireless LAN interface
  - Infrastructure (BSS) and Ad-Hoc Mode (IBSS)
- Flexible 9-30VDC power supply

SOFTWARE FEATURES

- Robust on-board TCP/IP stack with built-in web server
- Universal IP address assignment - Static IP, DHCP, Auto-IP
- Dynamic DNS support (DHCP Option 12)
- Secure web user interface (HTTP/HTTPS) with context-sensitive online help
- Pre-defined and custom device profiles
- Customizable web interface with optional Java applet support
  - File system w/512 kb user space
- Telnet command line interface
- Modem emulation and port logging
- Serial configuration interface
  - Command line, XML Remote Command Interface (RCI)
- User-defined network service/port configuration
  - HTTP/HTTPS, Telnet, Rlogin, Advanced Digi Discovery Protocol (ADDP), SNMP, RealPort, SSL/TLS, TCP/UDP
- TCP/UDP forwarding characteristics
  - Bytes, idle time, data pattern
- User-configurable TCP/UDP Socket ID
- Data pattern event notification via email/SNMP traps
- Intelligent SNMP device management
- Strong SSL/TLS based encryption
  - DES (56-bit), 3DES (168-bit), AES (128/256-bit)
- Patented RealPort COM/TTY port redirection for Microsoft Windows®, UNIX and Linux

MODEL......................PART NUMBERS

Model	North America	International
Digi Connect Wi-SP	DC-WSP-01-S	DC-WSP-01-S-W

Please visit our website for a complete list of available part numbers.

LEDS

- Power
- Network link
- Activity

WIRELESS SECURITY

- WEP (Wired Equivalent Privacy)
  - 64/128-bit encryption (RC4)
- WPA/WPA2/802.11i
  - 128-bit TKIP/CCMP encryption
  - 802.1X EAP authentication
    ° Dynamic WEP, LEAP (WEP only), PEAP, EAP-TLS, EAP-TTLS
    ° PEAP/MSCHAPv2, PEAP/TLS, PEAP/GTC, PEAP/OTP, PEAP/MD5, EAP-TTLS/EAP-MD5, EAP-TTLS/EAP-GTC, EAP-TTLS/EAP-OTP, EAP-TTLS/EAP-MSCHAPv2, EAP-TTLS/EAP-TLS, EAP-TTLS/MSCHAPv2, EAP-TTLS/MSCHAP, EAP-TTLS/PAP, EAP-TTLS/CHAP
  - Enterprise and Pre-Shared Key (PSK) mode

WIRELESS INTERFACE

- Standard: IEEE 802.11b
- Frequency: 2.4 GHz
- Data rate: Up to 11 Mbps with automatic fallback
- Modulation: CCK (11/5 Mbps), DQPSK (2 Mbps), DBPSK (1 Mbps)
- Transmit power: 16 dBm typical
- Receive sensitivity: -82 dBm @ 11 Mbps
- Antenna connector: 1 x RP-SMA

ENVIRONMENTAL

- Storage temperature: -40º C to +90º C (-40º F to 194º F)
- Operating temperature: -20º C to +65º C (-4º F to 149º F)
- Relative humidity: 5% to 90% (non-condensing)
- Altitude: 12,000 feet (3658 meters)

REGULATORY APPROVALS

- FCC Part 15, Subpart B
- ICES-003
- EN55022:1998, Class B
- EN301 489-3:2002, Class B
- FCC Part 15, Subpart C, Class B
- Canada RSS 210 (Wireless)
- AS/NZS CISPR 22:2002, Class B
- VCCI V.3/2001.04, Class B
- EN 300 328 V1.4.1 2003-04
- EN55024
- EN 301 489-3 V.1 4.1:2002
- IEC/EN 60950-1 (2001)
- UL/CUL 60950-1

POWER REQUIREMENTS

- 9-30VDC @ 450 mA

DIMENSIONS

- Length: 4.188 in (10.64 cm)
- Width: 1.680 in (4.267 cm)
- Depth: 0.999 in (2.537cm)

WHEN RELIABILITY MATTERS™