Quatech Wireless Device Servers

When you need the ultimate in wireless device server performance, ease of use and flexibility, specify Quatech.

Quatech wireless (802.11b) device servers are available in 1 or 2-port configurations.

Quatech, the performance leader in device networking, makes it easy to get started

An intuitive Installation Wizard gets you up and running quickly, automatically searching local and remote subnets for installed device servers within seconds of inserting the installation CD-ROM.

Any network settings automatically assigned by DHCP networks are displayed for confirmation, or enter a static IP address easily using the Installation Wizard – you won't need to bother with telnet sessions, MAC address data entry or special cables.

The wireless device servers may be managed through the Windows® Device Manager interface or a Web browser, so you can count on trouble-free configuration and maintenance long after the initial installation is completed. Ad-Hoc and Infrastructure modes are supported, as are WEP and WPA protocols to help safely secure data transfers.

With excellent power and receive sensitivity, the embedded DPAC Technologies™ 802.11b radio provides maximum performance in a small device server footprint.

Overcome the limitations of serial protocols by networking-enabling your devices

Serial (RS-232/422/485) devices are used in thousands of diverse industries including:

- **CNC/DNC Applications**
- **Energy Management**
- **Security & Access Control**
- **Government & Defense**
- **Materials Handling & Logistics**
- **Intelligent Traffic Systems**

Yet, while serial protocols have proven to be reliable and robust, there are drawbacks – cable lengths are limited and expensive, COM ports are often in short supply on the host PC, and the attached serial devices are not remotely accessible for monitoring, service or support.

A wireless device server overcomes all these limitations. Its hardware and drivers are invisible to connected serial devices and their software applications, routing data through an IP network to "virtual" COM ports installed on the host PC by the Installation Wizard.

Support for multiple serial protocols made simple

The 100 Series is designed for RS-232 applications and offers an optional +5V output on the serial connector to power devices. The 400 Series introduce a new software-selectable Multi-Electrical Interface, enabling RS-232, 422 or 485 on all ports without jumpers or switches.

Features and Benefits

- Now with WPA support!

- Includes the fastest and easiest Installation Wizard available

- A built-in Web server makes configuration and support available via Web browser

- Serial baud rates to 921kbps and 11 Mbps wireless radio support means fast serial and network data transfers

- A Freescale™ architecture is the industry standard in networking solutions

- Operating modes such as serial tunneling, IP multicast, virtual COM ports and other protocols provide true flexibility and easy integration.

- A PowerPC® processor eliminates data bottlenecks and common latency issues.

- A tightly integrated DPAC Technologies™ radio features the Conexant® Prism™ 3 chipset, the gold standard in wireless radio components.

- Backed by a 5 year limited warranty

SPECIFICATIONS

LAN interface

10/100 Base T (IEEE 802.3) auto-negotiation, auto MDI/MDIX and RJ-45 Ethernet connector

Model	Ports	Interface
SSEW-100D	1	RS-232
SSEW-100D-5V	1	RS-232 w/+5V
SSEW-400D	1	RS-232/422/485
DSEW-100D	2	RS-232
DSEW-100D-5V	2	RS-232 w/+5V
DSEW-400D	2	RS-232/422/485

Wireless Specifications

Technology: IEEE 802.11b DSSS, WiFi Compliant

Frequency:
  2.4 – 2.4835 GHz (US/Can/Europe/Japan)
  2.471-2.497 Ghz (Japan)

Channels:
  USA & Canada: 11 channels
  Europe: 13 channels
  Japan: 14 channels
  France: 4 channels

Data Rates Supported: 11, 5.5, 2, 1 Mbps

RF Power: 65 mW (Typical)

Sensitivity:
  -82 dBm @ 11Mbps, -86 dBm @ 5.5 Mbps
  -88 dBm @ 2 Mbps and -90dBm @ 1 Mbps

Security: WEP standard encryption, 64/128-bit WPA encryption available soon

Antenna: 2.2 dBi Rubber Duck Antenna, supplied and attached to RP-SMA bulkhead connector

Serial interface (RS-232 or RS-232/422/485)

Each port is a fully independent asynchronous DTE serial port, with:

- ❖ Full modem control
- ❖ Hardware flow control
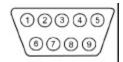- ❖ Optional 10-pin RJ-45 adapters for DB-9M connections are available

Speed:
Serial port supports data transfer speeds of up to **921.6** Kbps, depending on flow control protocols used, cable length and condition, and other factors

Certifications

FCC, Industry Canada, CE

Serial Connectors

DB-9 Male, External View

Signal Information:

RS-232	DB-9 Pin #	RS-422/485 4 wire mode
DCD	1	AuxIn-
RxD	2	RxD+
TxD	3	TxD+
DTR	4	AuxOut-
GND	5	GND
DSR	6	RxD-
RTS	7	AuxOut+
CTS	8	AuxIn+
RI	9	TxD-

2-wire mode supported, see owner's manual

Surge Suppression Option (Standard on 5V Models)

Surge suppressor is capable of sustaining up to 40-A peak, 8 x 20-µs transient surges, a clamping voltage of 30V (RS-232 mode) or 15.5V (RS-422/485 mode), and a peak energy dissipation of 0.1 Joules

Protocols and software

Management: UDP, TCP/IP, HTTP, DHCP, ARP, SNMP

Initial IP address configuration: DHCP, static IP set within the Installation Wizard or a custom UDP datagram utility (with command line interface) for unattended installations

Quatech provides several ways to manage, monitor and configure wireless device servers after installation:

- ∨ Windows® Device Manager (Quatech Device Manager in Windows NT)
- ∨ On-board HTML pages accessible from a standard web browser
- ∨ Simple Network Management Protocol (SNMP)
- ∨ Intellisock™ TCP socket services

Communication modes: Normal, Tunneling, Raw TCP, Auto TCP, Raw UDP or Intellisock TCP socket services

OS support

Device drivers provided for Windows NT, Windows 2000, Windows XP, and Linux

Raw TCP, Raw UDP, Tunneling, AutoTCP and Intellisock™ modes are O/S independent

Please check Quatech's website for the latest O/S driver support information

Power Supply

+5V, 2A (10 W) max DC, with auto-sensing AC adapter provided for 100VAC–240VAC, 50Hz–60Hz operation

Typical power consumption: +5V, 0.7A(3.5W)

Hardware

Conexant Prism™ 3 Wireless Chipset

CPU: Freescale™ PowerPC®
SDRAM: 8 MB
FLASH Memory: 2 MB (FLASH is field upgradeable)

+5V models limited to 500mA max current draw per port (fuse-protected)

Environment

Operating: 0° C to 70° C
Storage: –40° C to 70° C
Relative Humidity: 10% to 90% non-condensing

Dimensions

Length: 4.69" (11.91 cm)
Width: 3.33" (8.46 cm)
Depth: 1.18" (2.99 cm)
Weight: 15.1 oz. (428.0 g)

Accessories

Surge Suppression
DB-9 to RJ-45 Adapters
International Power Cords
DIN Rail Mounting Kit
RS-422 & 485 Termination Blocks