



QUATECH

400 Series MEI Device Servers

When you need the ultimate in device server performance, ease of use and flexibility, specify the new 400 Series from Quatech, featuring an elegantly designed multi-electrical interface (MEI).



Quatech MEI device servers are the fastest and easiest way to connect RS-232, 422 or 485 devices to a local network or the Internet.

An intuitive Installation Wizard gets you up and running in just minutes, automatically searching local and remote subnets for the correct model attached.

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

Quatech 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.

The 400 Series of device servers is now offered in 1, 2, 4 and 8-port configurations; a 16-port model is coming soon.

Why Network A Serial Device?

Serial (RS-232/422/485) protocols are a mature and reliable form of data transfer, used in millions of products in industries as diverse as:

- Industrial Automation
- CNC/DNC Applications
- Banking & Finance
- Energy Management
- Security & Access Control
- Government and Defense
- Material 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.

Quatech device servers help overcome all these limitations. Its hardware and drivers are invisible to connected serial devices and their software applications, routing data through “virtual” COM ports added to the host PC by the Installation Wizard. Within minutes, anyone with proper authorization can access a serial device over a LAN, an Intranet or even the Internet!

The 400 Series models introduce a new software-selectable Multi-Electrical Interface to the Quatech product line. Unlike many competing device servers on the market, Quatech offers MEI capability on all ports at the click of a mouse. LEDs visually tell you which ports are using which protocol, so go ahead, mix and match. Already the performance leader, Quatech has become the flexibility leader as well.

Features and Benefits

- 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 auto-negotiating 10/100 Ethernet support means fast serial and network data transfers
- Your choice of local COM port emulation, serial tunneling, broadcasting, multicasting and Raw TCP/UDP modes allows true flexibility when integrating into a variety of applications and operating systems
- Freescale™ architecture is the industry standard in networking solutions



- A PowerPC® processor eliminates data bottlenecks and common latency issues
- IntelliSock™ mode provides unique and powerful TCP socket services for custom applications
- SNMP support for simple network management
- Backed by a 5 Year Limited Warranty and the industry's best customer support team
- Designed, manufactured and supported in the USA



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SPECIFICATIONS

LAN interface

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

Serial interface (RS-232/422/485)

Model	Ports	Connector
SSE-400D	1	DB-9 Male
DSE-400D	2	DB-9 Male
QSE-400D	4	DB-9 Male
ESE-400D	8	DB-9 Male

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

- ❖ Full modem control
- ❖ Hardware flow control
- ❖ Available 10-pin RJ-45 adapter for DB-9M connector

Receiver inputs:

RS-232:

Input Voltage Rating: -15V to +15V
Receiver Skew: 120 ns (typical), 250 ns (max)

RS-422/485:

Input Voltage Rating: -15V to +15V Common Mode Input Voltage
Receiver Skew: 13 ns (typical)

Transmitter outputs:

RS-232:

High Level Output: +5V (min), +5.4V typical
Low Level Output: -5V (min), -5.4V typical
Transmitter Skew: 50 ns (typical), 200 ns (max)

RS-422/485:

Transmitter Outputs: 2V (min) for 100Ω load
Transmitter Skew: 5 ns (typical), 10 ns (max)
Distance: 4000 feet

Parity, Stop Bits:

Parity configurable as: None, Even, Odd
Data bits configurable as: 5, 6, 7, 8
Stop bits configurable as: 1, 1.5, 2

Speed:

Each 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

Surge Suppression (SS) Option

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

DB-9 Male Serial Connector, External View



Signal Information:

RS-232	DB-9M Pin #	RS-422/485
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-

Protocols and software

Management: UDP, TCP/IP, HTTP, DHCP, ARP, ICMP, SNMP (MIB II)

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

Quatech provides several ways to manage, monitor and configure 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 and Intellisock TCP advanced socket services

OS support

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

Raw TCP, Raw UDP (including broadcast and multicast), Tunneling, AutoTCP and Intellisock modes are O/S independent

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

Hardware

Processor: Freescale™ PowerPC®
SDRAM: 8 MB
FLASH Memory: 2 MB
Firmware stored in FLASH may be upgraded via LAN interface

Power supply

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

Typical power consumption: +5V, 0.8A (4W)

Environment

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

Dimensions

SSE/DSE-400D:

Height: 1.18" (2.99 cm)
Width: 3.33" (8.46 cm)
Depth: 4.69" (11.91 cm)

QSE-400D:

Height: 1.50" (3.40 cm)
Width: 9.96" (25.30 cm)
Depth: 4.69" (11.91 cm)

ESE-400D:

Height: 1.96" (4.97 cm)
Width: 9.96" (25.30 cm)
Depth: 5.40" (13.72 cm)

Certifications

FCC, CE

Accessories

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

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