

Multi-port device server NPort Server Lite series



- ◆ Built in LCD & configuration buttons onboard
- ◆ Surge protection to 15kV ESD
- ◆ Support for Windows 95/98/ME/NT/2000/XP & Linux 230Vac mains adapter included
- ◆ DIN rail mount capability
- ◆ Automatic network connection recovery
- ◆ RS485 automatic data direction control
- ◆ Ideal for devices such as CNCs, PLCs, weighing scales, scanners



Configuration options

The onboard LCD and buttons may be used for configuration and the unit can be set up using a serial console such as Hyperterminal or the PComm Lite package included.

Alternatively, it is possible to effect any configuration changes required using Telnet.

Management

NPort configurator for Windows/Linux.

NPort Manager for COM driver.

Firmware upgrade utility for Windows.

Supported protocols

For network connections these are TCP, IP, UDP, Telnet, RTelnet, DHCP and ICMP. For serial connection, RS232, RS422, RS485 and RS485 with automatic turnaround are supported depending on the model chosen.

Regulatory approvals

FCC B, CE B, UL, CUL, TUV

This product supports several modes of operation as follows:

Driver mode

The supplied driver establishes a transparent connection between host and serial device by creating a virtual local COM port for each of the device server's ports. Incoming serial data is buffered in the device server, passed through the TCP/IP protocol stack, transmitted across the LAN and arrives at the host PC's serial to Ethernet driver which strips away all unwanted elements of the TCP/IP frame, leaving only the original serial data. From the user's point of view, the remote device appears as though it were directly connected to the PC and can be communicated with using a standard COM port in the host PC's operating system.

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Socket Mode

The socket mode of operation provides a way of directly accessing device servers across a TCP/IP network without first having to install a driver. Sockets are standard APIs (Application Programming Interfaces) used to access network devices over a TCP/IP network. Two socket API standards are in common use. The original standard, known simply as 'Sockets' was developed for the Unix / Linux environment. The Windows alternative is "Win Sock." Although there are fundamental differences between these two standards, most of the API function calls from the two systems have the same structure and consequently, socket based network control programs are portable across almost all system platforms.

Pair connection (DE-301/331 only)

This involves using two appropriately configured device servers that work in unison to form a serial tunnel. The serial tunnel operates by encapsulating serial data in a TCP packet, which is then transported across an Ethernet network. This operation mode allows transparent connection of all serial devices and is also a good way to network DOS based PCs or PDAs. Because the connection is truly transparent, proprietary protocols such as Siemens or Allen-Bradley PLC protocols can be transmitted.

Ethernet Modem (DE-301/331 only)

The Ethernet modem mode of operation is similar to pair connection in that it requires two device servers, visible to each other by their IP addresses. The difference, however, is that Ethernet Modem allows the user to determine the destination dynamically using well-known modem control commands (AT commands). Any system designed to use a serial modem for a dial-up connection can make use of this technology without hardware or software changes with the obvious benefit of using legacy systems on modern networks.

SPECIFICATIONS

Connector:	Male DB9 serial, RJ45 Ethernet
Ethernet:	Auto detecting 10BaseT/100BaseTx
Data rate:	50 to 230kbaud
Operating temperature:	0 to +55°C
Power:	9 to 30Vdc @ 1.05A max
Dimensions:	105 x 155 x 33mm (W x L x H)

Codes

96003872	DE-301	Single port RS232 device server with software & Ethernet cable
96003873	DE-302	Dual port RS232 device server with software & Ethernet cable
96003874	DE-304	Four port RS232 device server with software & Ethernet cable
96003875	DE-331	Single port RS422/485 device server with software & Ethernet cable
96003876	DE-332	Dual port RS422/485 device server with software & Ethernet cable
96003877	DE-334	Four port RS422/485 device server with software & Ethernet cable
91035188		RS232 cable, DB9 female to DB9 male, 2m
91020949		DK-35A DIN rail mounting kit (35mm) for NPort series
91035059		Cat 5e moulded patch cable, Grey 2m