

NPort Express DE-311



Moxa serial to Ethernet device server

NPort Express DE-311

- Auto-detecting 10/100Mbps Ethernet interface - no configuration required
- RS232, RS422 or RS485: DIP switch selectable
- Serial port appears as native com port in Windows or Linux
- Automatic network connection recovery
- OEM version available - NPort Express module
- Supported data rates up to 230Kbaud



The NPort Express can convert any serial device with an RS 232/422/485 interface into a network enabled device. With its compact size, low cost, single channel and support for data rates up to 230Kbaud, this unit is ideal for OEMs wanting to add a LAN interface to new or existing instrumentation without the costs associated with board level re-design.

Configuration

The NPort Express can be configured by both its LAN and serial interfaces. This means that Telnet or a serial terminal emulator can be used to set up key features of the unit, such as the IP address and serial port properties. A password protection facility can then preserve the unit's configuration, preventing changes being made by unauthorised users. External DIP switches allow configuration for operation in the following serial protocols: RS232; RS422; RS485 or RS485 with automatic transmission turnaround.

Operation

Once the NPort Express is established with an IP address on the target network, the TCP/IP protocols become transparent to the user. The supplied driver software handles any protocol conversions leaving the user to address the serial port exactly as though it were a native com port in their operating system. The included 'PComm Lite' development package allows Windows applications to be created in no time.

Other modes of operation include a direct connection to the DE-311 via a socket API. This allows access to the raw data transmitted by the unit across a network, hence its name - Raw Connection Mode.

Pair Connection Mode allows two DE-311s to talk transparently to each other across Ethernet. This can be ideal for making use of existing cabling when installing a serial device.

Ethernet Modem, similar to Pair Connection allows two DE-311s to talk to each other across a network, but in this instance standard Hayes modem compatible AT commands can be used to control connection. This is an ideal solution for legacy systems where a hardware and software upgrade would be uneconomical.

Cost-saving

Existing equipment and software investment need never be out of date due to a lack of Ethernet or TCP/IP connectivity. With the NPort Express, devices such as CNCs, milling machines, card readers, PLCs, switching machines, measurement instruments and UPSs will become powerful tools with network connectivity.

Other applications

There are now literally millions of instruments in use with serial (RS232, RS422 & RS485) interfaces. This means that there are a great many applications for the NPort Express. Here are just a few:

- * Industrial control/Process control
- * Manufacturing automation
- * Telecom/Optical fibre network management
- * Hospital/Laboratory automation
- * Remote image transmission
- * Entrance control/security/attendance management

SPECIFICATIONS

| | |
|--------------------|--------------------------------------------------------------------------------------|
| Onboard processor: | 80186 |
| Onboard memory: | 512kB |
| Serial interface: | RS232/422/485 to female DB9 connector |
| LAN interface: | Auto-detecting 10/100BaseTx, RJ45 connector |
| Baud rate: | 50 to 230kbaud |
| OS supported: | Windows 95/98/2000/NT/ME/XP & Linux |
| Signals: RS232: | TxD, RxD, RTS, CTS, DTR, DSR, DCD,GND; RS422:- TxD±, RxD±, RTS±, CTS±; RS485:- Data± |
| Power: | 9 to 30Vdc, 400mA @ 9Vdc |