Eport 101/102

The Data Connect Eport 101/102 Ethernet Serial Server connects RS232, RS422, and RS485 serial devices to an Ethernet LAN/WAN providing a reliable communication connection. The Eport 101/102 Windows driver installs virtual COM ports in the Device Manager of the operating system. The virtual COM port is designed to establish a connection with the Eport 101/102. This in turn will allow communications with the connected serial device in the same manner as a device connected to the COM port in a PC. The LAN becomes transparent to the serial device and the software running on the PC. The Eport 101/102 also offers a Heart Beat feature to insure reliable communications connection.

The Eport 101/102 can be configured as a TCP Client / Server or UDP. The E-port 101 operates in "Direct IP Mode", "Virtual COM Mode", and "Paired Mode".

Direct IP connection allows applications using TCP/IP or UDP/IP network socket programs to communicate with the asynchronous serial port on the Eport 101/102. In this type of application the Eport 101/102 is configured to TCP or UDP server. The socket program running on the PC establishes a communication connection with the Eport 101/102. The raw data is sent directly to and from the serial port.

The Virtual COM mode requires the installation of the virtual COM port device driver. In this mode, the Eport101 must be set to either TCP/server or UDP/server in the menu with a designated communication port number. The virtual COM driver is a TCP or UDP client. Once the connection is made, the LAN is transparent to the serial device. Applications work just as if the serial device is connected a host's physical COM port. The virtual COM port converts the application's data into IP packet destined for the Eport 101/102, which in turn converts the IP packet back to serial data.

Paired mode is also called serial tunneling. When this type of configuration is selected, no additional software is needed to install in the host PC. In fact a PC is not required to make the connection. Any two dumb serial devices that can communicate with each other through a serial link will be able to communicate using two Eport 101/102s and the LAN. Two Eport 101/102s are configured with one setup as a TCP or UDP client and the other to TCP/UDP server. When setting up the Server, the Remote IP address section must contain the address of the Client. This will allow the Client's IP address to pass the IP address-filtering feature of the Server. Conversely, the Remote IP address of the Client must contain the Server's IP address.

The Eport 101/102 provides a convenient way to establish reliable communications between two devices. Communication port 5300 is reserved for the Heartbeat Protocol. If a loss connection occurs the Heart Beat feature will try to reconnect the TCP data connection every 5 seconds until communications is established again.

Eport 101/102 will work at Loop Back Mode, all data is sent back immediately. This feature makes the connection testing eas

Key Features

DIN Rail or Panel Mount

Supports 10/100Mbps Ethernet

Supports RS232, RS422, and RS485 Serial Interface

Supports LAN and WAN Communications

In Server Mode Supports Individual Client Sessions for Security

Management Access Password Protected

Virtual COM drivers for Windows NT / 98 / ME / 2000 / XP

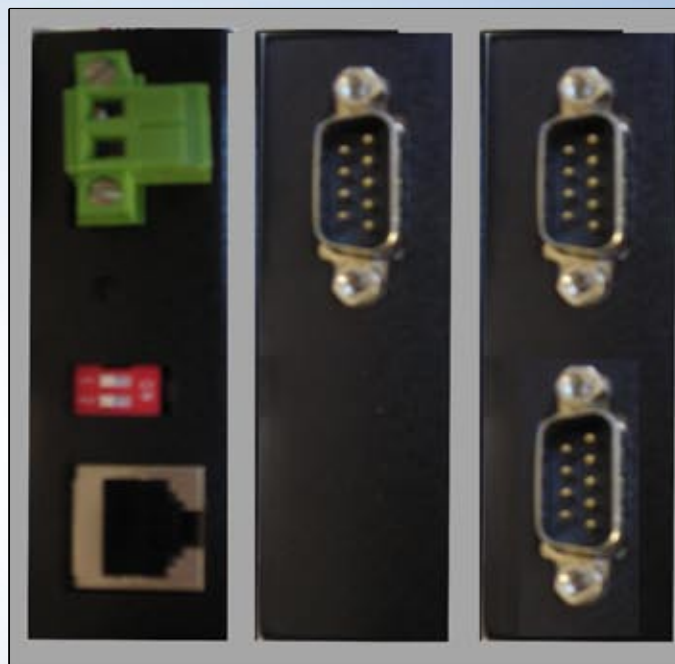Supports Socket Connection, TCP Server, TCP Client, and UDP

Support up to 2 TCP Connection in TCP Server Mode.

Heart Beat Connection Guards against Power Failure and Network Disruption.

Supports Loop Back Mode Testing

General Specifications

Serial Buffer:	Output 64Kbytes – Input 8K bytes per port
Serial Connection:	DTE – DB9 Male
LAN:	10/100 Mbps Auto-Detecting 10 Base T, 100 Base TX

Serial Interfaces:

RS232:	TX, RX, RTS, CTS, DTR, DSR, DCD, GND
RS422:	TX+, TX-, RX+, RX-, RTS+, RTS-, CTS+, CTS-, GND
RS485:	Data+, Data-, GND

Data Rate:	110bps to 230.4kbps
Parity:	None, Even, Odd, Mark, Space
Data Bits:	5, 6, 7, or 8
Stop Bits:	1, 1.5, or 2
Protocol:	TCP, IP, ARP, DHCP, Telnet, HTTP, UDP, ICMP
Management:	Manager Software, Serial Console, Telnet, Web Server, Firmware upgradeable
Dimensions:	8.5cmL X 11.5cmW X 2.3cmH
Power Requirements:	9-15VDC, 300mA

Operating Temperature:	0°C to 50°C
Storage Temperature:	-20°C to 60°C
Humidity:	0-90% Non-condensing
Approvals:	CE, FCC

Model Numbers and Optional Features

DCE/Eport101
1-port Serial Device Server

DCE/Eport102
2-port Serial Device Server

DB9M Pin	RS232	RS422	RS485
1	DCD	RX-	--
2	RXD	RX+	--
3	TXD	TX+	DATA+
4	DTR	TX-	DATA-
5	GND	GND	--
6	DSR	CTS-	--
7	RTS	CTS+	--
8	CTS	RTS+	--
9	RI	RTS-	--

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Doc no. 06042008Eport