EM100 Serial-to-Ethernet Module

Tibbo TECHNOLOGY

Features

- 10BaseT Ethernet port
- Built-in magnetics
- One TTL serial port
- Low-power (40mA@5V)
- Two I/O lines
- Sealed (potted) package

About

The EM100 is Tibbo's original 10BaseT serial-to-Ethernet product for onboard installation — it all started with this orange module.

The EM100 has magnetics on-board and requires only one external component — an RJ45 Ethernet connector. This device has the lowest power consumption of all Ethernet modules offered by Tibbo.

The EM100 is fully sealed (potted) for maximum environmental protection.

The product is offered with Tibbo Device Server Toolkit software, which includes Virtual Serial Port Driver for Windows and Linux.

Specifications

- 10BaseT Ethernet port with built-in magnetics.
- TTL serial port (TX, RX, RTS, CTS, DTR, and DSR lines).
- Two additional I/O lines.
- Four control lines for status LEDs.
- Power: 40mA @ 5V.
- Dimensions: 46x28x13mm.
- Fully sealed (potted) design.
- Firmware is upgradeable through the serial port or network.

Functionality

Serial-over-IP Firmware

- Full- and half-duplex serial port modes.
- Server, client, and server/client network ("routing") modes.
- Configuration stored in the EEPROM.
- Detailed status indication via external LEDs.
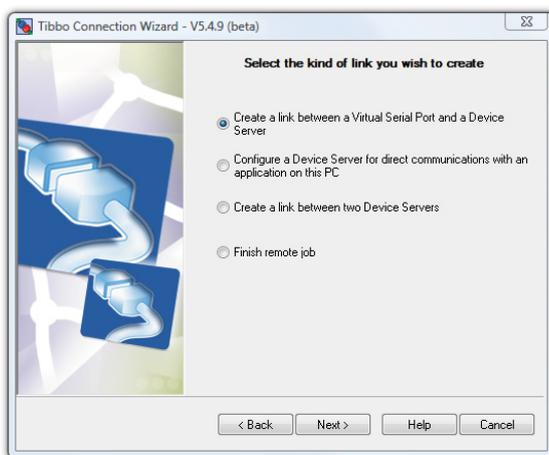- Setup through the serial port or network (UDP commands).

continued on next page

Functionality (continued)

Serial-over-IP Firmware (continued)

- Remote control of all I/O lines including RTS, CTS, DTR, and DSR.
- "On-the-fly" commands for immediate serial port configuration.
- Serial-side "modem" commands for network connections control.
- Direct control of ADSL modems.
- Supports UDP, TCP, ARP, ICMP (ping), DHCP, PPPoE, LCP.

Tibbo Device Server Toolkit (TDST) Software

All Tibbo device servers are supplied with free software which includes:

Connection Wizard: guides you step-by-step through creating data links between a computer and a device server, or between two device servers.

DS Manager: used to locate, setup, manage, monitor, and upgrade Tibbo device servers and compatible devices.

Virtual Serial Port Driver (VSPD): turns serial ports of Tibbo device servers into remote COM ports of your PC.

Tibbo Monitor: logs the activity of Virtual Serial Ports.

For more information, see http://soi.tibbo.com/tdst.html