

# EM1500 Serial – Ethernet Bridge™

With Web Browser Interface & GUI Configuration From \$249 (qty. 1)



The EM1500 Serial-Ethernet Bridge is a device that converts multi-point serial communications to a TCP/IP network. The EM1500 connects to and network enables as many as 4 RS-232 serial devices simultaneously. In addition, the EM1500 provides an SPDT relay, 2 digital open collector outputs and 3 digital inputs suitable for interfacing to mechanical switches or logic level circuits.

Success in today's marketplace demands rapid, low-cost access to information. The EM1500 is designed to allow easy setup and monitoring via a "black box" approach. No programming is needed. Quick configuration over Ethernet, using a web server or the stand-alone GUI configuration program, is easy and convenient.

The EM1500 interfaces with modems, sensors, card readers, bar scanners, printers, and other types of serial devices. Using two EM1500s allows the creation of a transparent serial bridge, thereby using some of the more advanced software features, such as packaging and protocol conversions. Third party, RFC2217-compliant comm port redirector software can be added that allows a PC application to read RS-232 ports on a remote EM1500 on the Internet or a LAN as local serial ports.

### **Hardware Features**

- 10/100Base-T Ethernet
- 4 Serial Ports:
- Up to 600 Kpbs throughput
- Serial ports 3 & 4 are either independent RS-232 ports up to 120 Kbps or TTL
- One half-duplex RS-485
- Easily interface legacy serial devices to Ethernet
- Extend the communication distance between 2 serial devices
- Metal enclosure for industrial applications

#### Software Features

- Web browser interface for remote configuration
- GUI for easy configuration and monitoring
- Secure remote configuration
- AT command set emulation
- RFC2217 compliant



## **Configuring the EM1500**

The EM1500 requires only minimal configuration. All of the necessary operating software and start-up/configuration files come preloaded with an easy-to-configure GUI and web browser application.

### **Tool Kit**

The EM1500 Tool Kit includes software, users manual, schematics, AC adapter, communication cables, and Ethernet crossover cable. (International orders do not include AC adapter unless specifically requested.)

EM1500 Serial Ethernet Bridge Specifications & Features	
FEATURE	EM1500
Microprocessor	Rabbit 3000 at 44.2 MHz
Ethernet	10/100Base-T, RJ-45
Flash	512K/256K data
SRAM	512K program execution
Backup Battery	3 V lithium coin type, 950 mA h
Relay	SPDT, 1 A @ 30 VDC, 0.3 A @ 120 VAC
Digital Inputs	3 protected to ± 36 V
Digital Outputs	2 sinking up to 750 mA, $\pm$ 0.5 VDC max.
Serial Ports	1 DTE RS-232 1 DCE RS-232 1 RS-485 half duplex 1 or 2 configurable serial port(s): Two 3-wire, One 5-wire, or One 9-wire (TTL only)
Serial Rate	75-230.4 Kbps, 7/8 data bits, N/O/E/M/S parity, 1 stop, min thru-put: 600 Kbps
Serial Buffer	1020 bytes
Configuration GUI	Supports WIN32, x86 Linux
Flow Control (RS-232)	None, XON/XOFF, RTS/CTS, DTR/DSR, DCD set independently for each directions (Tx, Rx)
Protocols	TCP/IP, telnet, RFC2217, DHCP, ARP, ICMP, DNS
LEDs	4: PWR (red), ACT (yellow), LINK (green), USER (red and green)
Power	9-36 V DC @ 1.5 W max
Operating Temp.	-40°C to +70°C
Humidity	5–95%, non-condensing
Connectors	2 DB9 (1 male, 1 female) 1: 1x9 IDC, 0.1" pitch header 1: 1x3 IDC, 0.1" pitch header 1: 2x5 IDC, 0.1" pitch header RJ – 45 1: 2 Position screw terminal
Enclosure Size	3.56" × 4.18 " × 1.72" (90 × 106 × 44 mm)
Pricing (qty. 1/100/1000) Part Number	\$249/204/174 101-0583
Tool Kit Part Number	\$99 U.S. 101-0585 Int'l 101-0586

# **Tool Kit includes:**

- Prototyping board
- EM1500 software on CD-ROM
  - Firmware
  - GUI
  - Web Server

- AC adapter (U.S./Canada only)
- Multiple communication cables
- User manual
- Wire Kit
- Screwdriver