EM1000 Ethernet Modem

NEW!

Features

- *RS-232 configuration port, RS-232/485 data/configuration port, and Ethernet 10BaseT port*
- *Status LEDs: power, bus active, local active, and remote connection allow easy diagnostics*
- *Remote configuration via Telnet allows modifying field installations*
- *On-the-fly changes to target addresses allows point to multi-point networking ability*
- *Security-access features restrict remote connections*

Applications Include

- *Exchanging data among Z-World controllers*
- *Exchanging data between Z-World controllers and RS-232 devices*
- *Interfacing devices such as scanners, printers, PCs and barcode readers over Ethernet*
- *Sending e-mail alerts based on status from an attached device*
- *General networking of multiple devices*

Innovation in Control Technology

ZWORLD

The EM1000 is an industrial grade Ethernet modem that allows fast communication between an RS-232 device and an Ethernet based network. The unit provides a dynamically reconfigurable point-to-point logical connection to other Ethernet enabled devices.

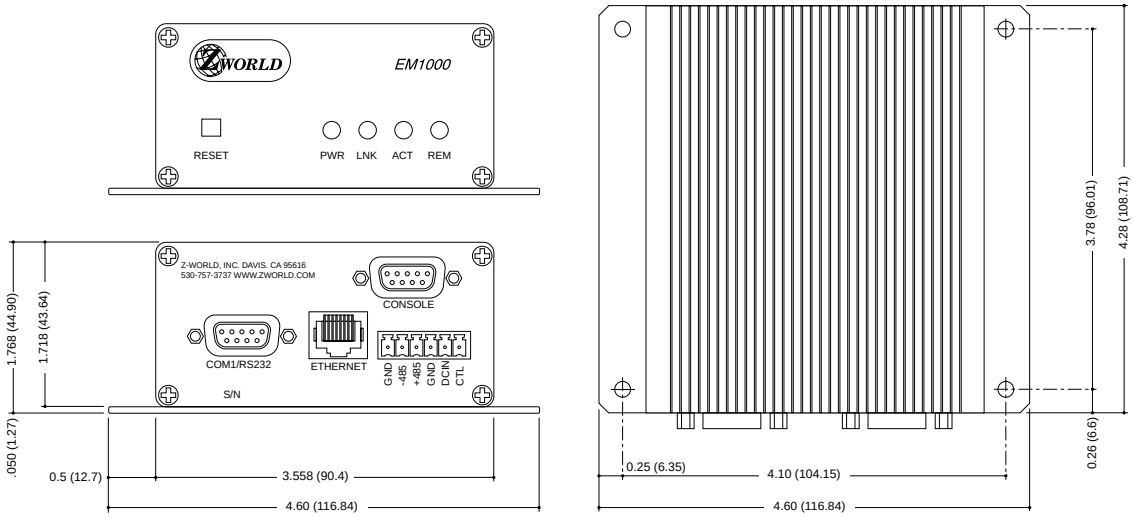
The EM1000 permits information exchanges over Ethernet between PCs, barcode readers, serial operator interfaces and other RS-232 based devices. The modem can either act as a "listener" or establish links automatically or on demand.

The EM1000 was designed to work with any device having an RS-232 port, including Z-World controllers. A 10BaseT port easily connects the EM1000 to an Ethernet network consisting of low cost off-the-shelf cables, hubs, etc.

Configuration is easy using the well known DOS operating system, with internal flash memory storing system files. All operating software and startup/configuration files are loaded on the EM1000. The EM1000 establishes a transparent data path which allows both simple and higher level protocols, like FTP or Modbus, to be supported from one end of the link to the other.

TCP/IP communications over Ethernet is facilitated using the on-board EM1000 software. Users can modify the working configuration file and IP settings file for the modem via a terminal connected to COM2. An attached device can reconfigure the modem using COM2, a digital control signal, or the DSR line on COM1 to establish sequential point-to-point links with different destinations. The modem can also dynamically read a new configuration from flash on command.

Available as board-only version



Connector Pinouts

COM1	COM2
DCD (in)	+5V
RxD (in)	TxD (out)
TxD (out)	RxD (in)
DTR (out)	N/C
GND	GND
DSR (in)	N/C
RTS (out)	+5V
CTS (in)	+5V
NC	+5V

Figure 1. EM1000 Enclosure and Mounting Plate Dimensions

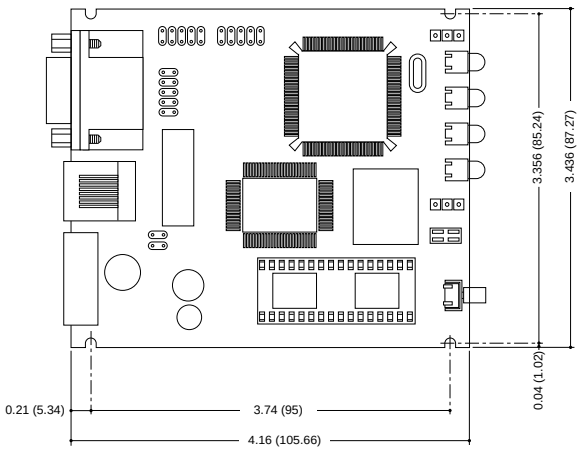


Figure 2. EM1000 Board-only Dimensions and Outline

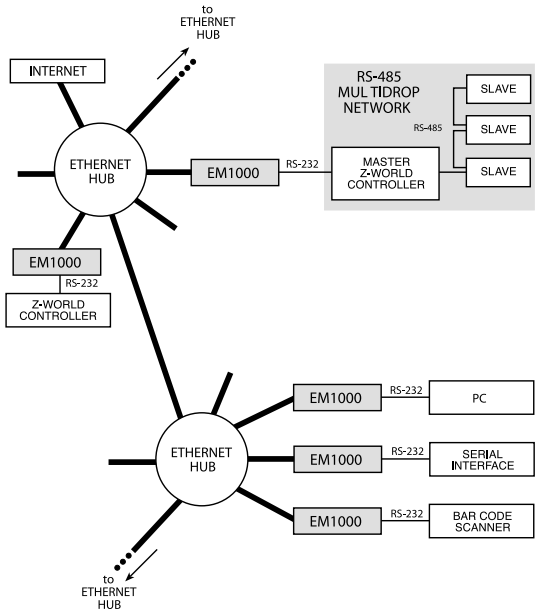


Figure 3. Typical Setup

Versions

EM1000	Board with enclosure, panel mount plate, mating power connector, and operating software.
EM1010	EM1000 without enclosure or mounting plate.
Development Kit	User manual, schematics, 110VAC to 24VDC power supply, (3) communication cables, and 3-foot Ethernet crossover cable.

Options and Upgrades

E-Hub	4-port Ethernet hub with 110VAC power supply
Power Supply	External 24VDC power supply provides 800mA of max. current.
Cable Kit	(4) 3-foot Ethernet patch cables

EM1000 Specifications

Storage Temp	-40C to +70C
Operating Temp	-40C to +70C
TCP/IP Protocol	Built-in ping utility and security features
Input Power	9-32 VDC
LEDs	(4) - power, bus active, local active, and remote connection established
Processor	Intel 386eX
Communications (RS-232/485)	COM1 RS-232/485 data port (3-wire to 9-wire operation) and COM2 RS-232 configuration port (3-wire operation)
	10BaseT Ethernet port
Reset Switch	Yes - used during initial configuration

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