INC,LLC

ETHERNET/RS232 CAN GATEWAY

ETH177X

*Note SD card shown ejected.

Overview:

The ETH177X acts as a gateway to connect multiple CAN networks together using Ethernet. The module transparently transfers CAN messages between multiple networks using TCP or UDP protocols. The connections can be through local intranet or remote internet connections. CAN filtering is provided to reduce the amount of unnecessary Ethernet and CAN traffic. The module settings can be modified using the built in web pages allowing users to configure the module without any special PC software. The unit can also be used to monitor, configure, and control networks such as DeviceNet™, CANopen, or other CAN based networks using a PC. The unit supports Ethernet or RS232 connections to the PC.

The firmware for the ETH177X is stored in downloadable flash. This allows field updates and optional firmware to be loaded and executed. The unit comes with generic CAN firmware installed (ETH1770). This firmware supports both CAN 2A and CAN 2B frame formats and allows higher level protocols to be implemented on the PC. The soft API libraries are included for CANopen and DeviceNet. These libraries can be used in programs created by the user in such languages as Visual C, Visual Basic, and C++ Builder. Other firmware can be purchased from INC such as a DeviceNet Master or CANopen Master.

The unit has a RJ45 socket for the Ethernet connection and a DB9 connector for the RS232 connection. The CAN network connector is available in a standard low cost 5 pin Combicon connector with screw flanges or an optional 5 pin sealed micro connector. The Combicon connector allows the use of lower cost cabling, and also allows the use of a dual row Combicon plug to facilitate the daisy chaining of modules in the network. Options include a battery backed real time clock that allows the unit to timestamp all incoming CAN messages, and a connector that supports SD/MMC Cards. SD cards up to 2GB are supported that can be used to log CAN data for data analysis or troubleshooting.

Applications:
CAN->Ethernet Bridge/Gateway, Configuration Tools, Diagnostic Tools, Data Logging, Soft PLCs, etc.

Contents:
The module is shipped with a Null Modem RS232 cable. All applications can be downloaded from the INC, LLC. Website at www.incllc.com. The applications available include a CANopen configuration tool, a DeviceNet configuration tool, and a CAN data logger that stores received CAN messages into a database.

Ordering Information:

Order #: ETH177X-NC-NI-CK-DM-EN

Abbreviation	Meaning	Option
NC	Network Connector	MC=5 pin micro CB=5 pin Combicon with screw flanges
NI	Network Isolation	NI= Non-Isolated IS= Isolated (Isolation is required for DeviceNet™ compliance if the unit is connected to a device powered by a source other than DeviceNet™)
CK	Real Time Clock	NT= No Time Clock RT= Real Time Clock
DM	Data Module	00= No Data Module SD= Secure Digital/MMC
EN	Enclosure Type	AL= Extruded Aluminum (shown) NO= No Enclosure, Board only

Firmware Modules:
ETH1770 CAN gateway (Included)
ETH1771 DeviceNet Master
ETH1772 CANopen Master
ETHCUST Custom Firmware