



ECAN-240

ECAN-240 (Modbus TCP to 2-port CAN Bus Gateway)

Features

- Fully compatible with the ISO 11898-2 standard
- Built-in DIP-switch to enable/disable the terminal resistor
- Two CAN bus interfaces with 9 pin D-sub connector
- Two rotary switches for selection of CAN bus Baud Rate
- CAN bus ID filter
- CAN bus listen only mode
- Modbus TCP Server function
- CAN pair connection
- Web configuration



Introduction

The ECAN-240 module is a Modbus TCP to 2-port CAN Bus Gateway. As its functionality, that provides communications via the Ethernet based on the Modbus TCP industrial protocol, meaning that the module can be easily integrated with an industrial network. The ECAN-240 module includes two CAN bus interfaces, meaning that more various CAN applications can be supported.

Hardware Specifications

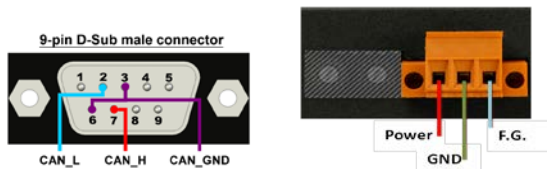
CAN Interface	
Channel	2 channels with 9 pins D-sub male connector
Baud Rate (bps)	10kbps to 1Mbps
Terminal Resistor	Built-in 120 ohm terminal resistor, enabled/disabled via DIP-Switch
Isolation	3 kV VDC for DC to DC, 2500 Vrms for photo couple
CAN Bus Specification	ISO 11898-2 CAN 2.0A and CAN 2.0B
Ethernet	
Controller	10/100Base-TX Ethernet Controller (Auto-negotiating, Auto_MDIX)
Connector	RJ-45 with Ethernet indicator
Protocol	Modbus TCP Server, TCP, UDP, HTTP
Socket connections	8 for TCP, 1 for UDP
LED Indicator	
LED	Power (1), CAN Bus Status (2), CAN Bus Tx (2), CAN Bus Rx (2) and Ethernet Status (RJ-45) (2)
Power	
Power	Unregulated +10 ~ +30 VDC, (0.08)@24VDC, 2W
Protection	Reverse polarity protection, Over-voltage brown-out protection
Mechanical	
Installation	DIN-Rail
Dimension (W x L x H)	106.8mm x 146.8mm x 25.9mm
Environment	
Operating Temperature	-25°C to +75°C
Storage Temperature	-40°C to +80°C
Relative Humidity	10 to 90% RH, Non-condensing

Web Configuration

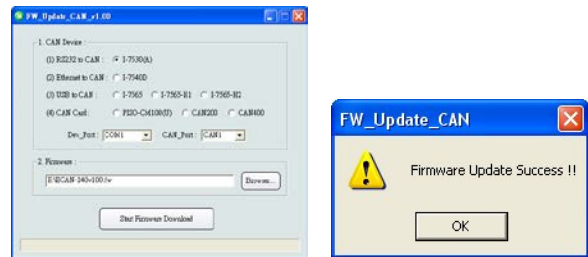


- Ethernet, CAN, and basic Settings
- Modbus TCP Server Settings
- CAN Pair Connection Settings

Wiring and Pin Assignments



Firmware update function



- Firmware update via CAN bus

Dimensions (Units: mm)



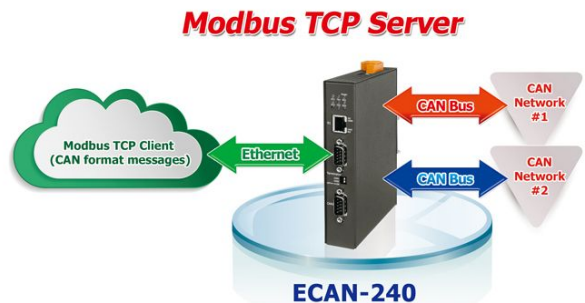
Application

Modbus TCP Server:

The Modbus TCP Server function is used to implement communications between a CAN device and a Modbus TCP Client. When the ECAN-240 module is acting as a Modbus TCP Server, the Modbus TCP Client needs to use Modbus commands based on the CAN format in order to access the ECAN-240 module. The ECAN-240 module will then translate these commands into CAN format messages and send them to the CAN networks. Similarly, when a CAN format message is received from the CAN network, the ECAN-240 translates the message into Modbus format, which can then be accessed using a Modbus command.

Pair Connection:

The Pair Connection function is used to implement communication between two ends of CAN network. CAN Network #1 can communicate with CAN Network #3 or CAN Network #4 using pair connection configuration. Similarly, CAN Network #2 can also communicate with CAN Network #3 or CAN Network #4 in the same manner. The pair connection function on the ECAN-240 module is implemented via either the TCP or the UDP protocol.



Ordering Information

ECAN-240	Modbus TCP to 2-port CAN Bus Gateway
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