ECAN-240-FD

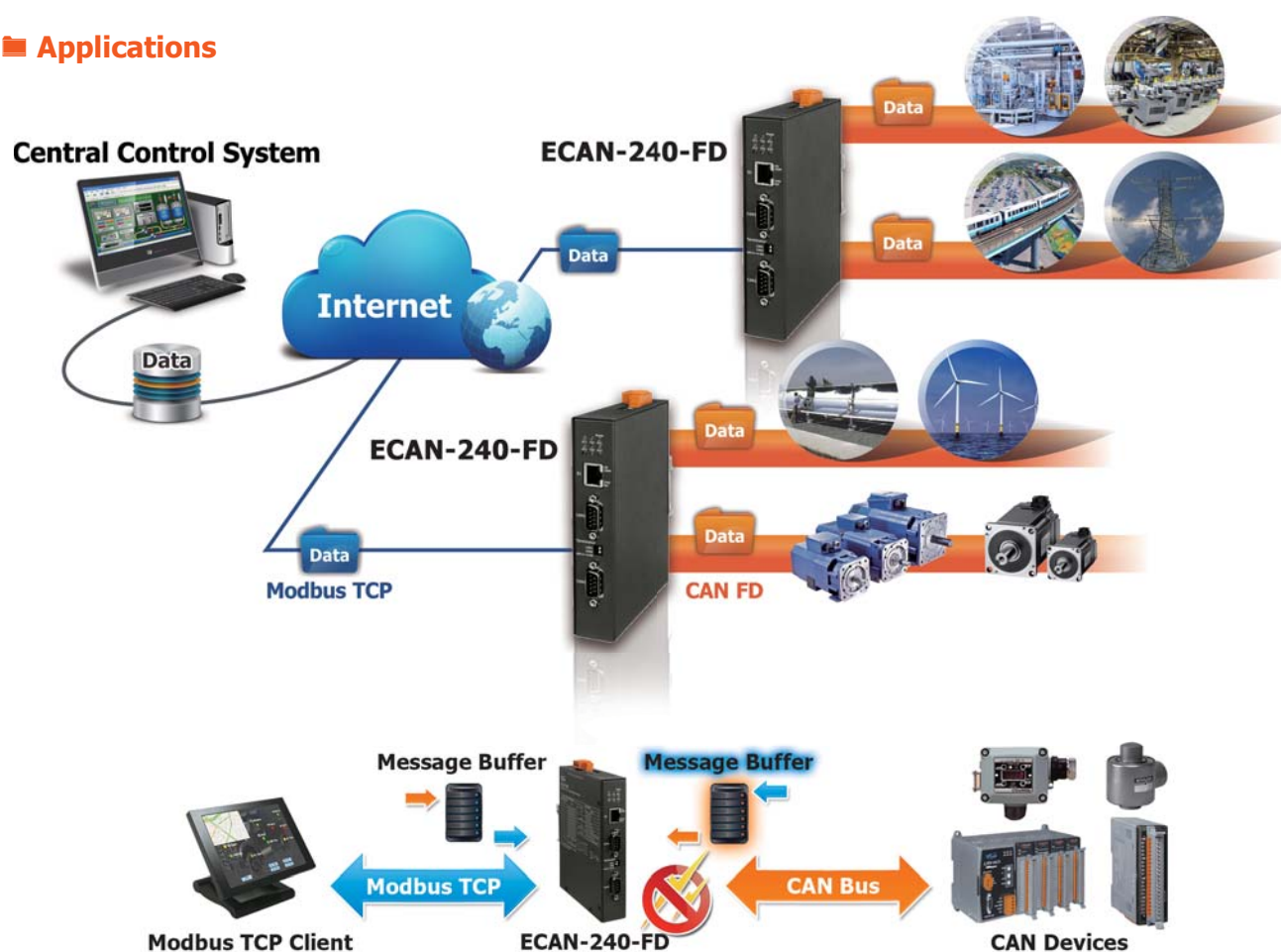Modbus TCP to 2-port CAN FD Gateway

Features

- Compatible with the ISO 11898-2 standard
- Compatible with CAN specification 2.0 A/B and FD
- CAN FD support for ISO and Non-ISO (Bosch) standards switchable
- CAN FD bit rates for data field from 100 kbps to 10000 kbps
- CAN bit rates from 10 kbps to 1000 kbps
- Supports TCP server-mode operation
- Supports UDP responder for device discovery (UDP Search)
- Static IP or DHCP network configuration
- Tiny Web server for configuration (HTTP)
- Easy firmware update via the Ethernet (BOOTP, TFTP)

CE RoHS

Introduction

The IoT (Internet of Things) has been a much discussed topic in recent years. Using the IoT concept, it is easy to integrate the environment of heterogeneous network and let all of the things into be digitized making life more convenient. In order to provide additional access to IoT applications related to industry based on the CAN bus, ICPDAS has developed a new Ethernet product, the ECAN-240-FD. The ECAN-240-FD module is a Modbus TCP to 2-port CAN FD (CAN with Flexible Data-Rate) 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-FD module includes two CAN bus interfaces, meaning that more various CAN applications can be supported.

Applications

▤ Specifications

CAN Interface

Channels	2
Connector	9-pin D-sub male x 2
Transmission Speed	CAN bit rates: 10 ~ 1000 kbps, CAN FD bit rates for data field: 100 ~ 10000 kbps
Terminator Resistor	DIP switch for the 120 Ω terminal resistor
Isolation	3 kV VDC for DC to DC, 2500 Vrms for photo couple
Specification	ISO 11898-2, CAN 2.0 A/B and FD

Ethernet Interface

Ethernet	10/100 Base-TX, 8-pin RJ-45 x 1, (Auto-negotiating, Auto-MDI/MDIX, LED indicator)
Protocol	Modbus TCP, HTTP, BOOTP, TFTP

LED Indicators/Display

Status	1 x Power status, 3 x CAN1 status, 3 x CAN2 status

Power

Power Supply	Unregulated +10 ~ +30 VDC
Power Consumption	0.05A @ 24VDC

Mechanical

Installation	DIN-Rail
Casing	Metal
Dimensions (mm)	122.0 x 160.0 x 28.0 (W x L x H)

Environment

Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 90% RH, Non-condensing

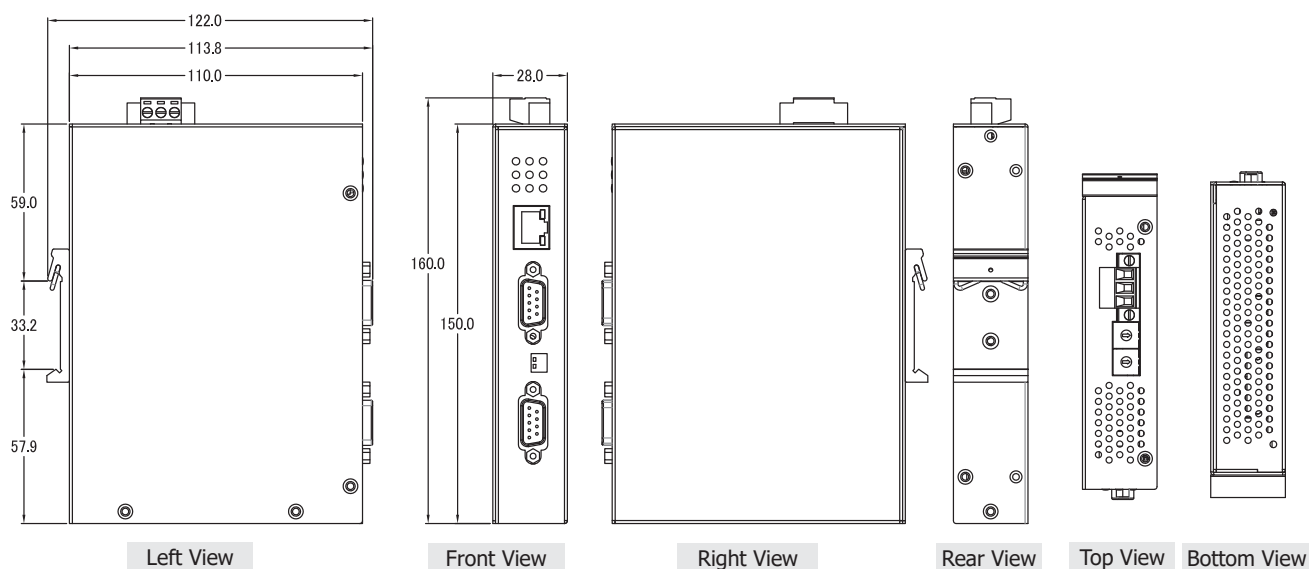**Attention:**
The maximum CAN FD data rate can be exceeded depending on the concrete operating conditions (cable length, network topology, settings,...), but it can also not be reached.

▤ Pin Assignments

Port	Schematic diagram	Pin	Description
CAN	9-pin D-Sub male connector	1. N/A	No used
		2. CAN_L	CAN_Low bus line of CAN port
		3. CAN_GND	CAN ground of CAN port
		4. N/A	No used
		5. N/A	No used
		6. CAN_GND	CAN ground of CAN port
		7. CAN_H	CAN_High bus line of CAN port.
		8. N/A	No used
		9. N/A	No used
Power		1. +Vs	Voltage Source Input. +10VDC ~ +30VDC.
		2. GND	Power Ground.
		3. F.G.	Frame Ground.

▤ Dimensions (Units: mm)

Left View   Front View   Right View   Rear View   Top View   Bottom View

▤ Ordering Information

ECAN-240-FD CR	Modbus TCP to 2-port CAN FD Gateway (RoHS)