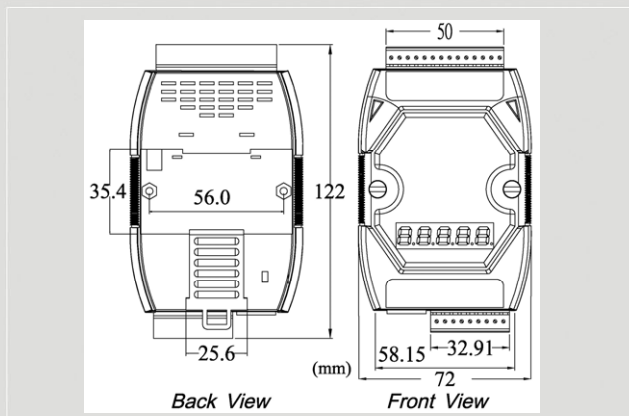# DeviceNet Series Products

Modbus/TCP server to DeviceNet master Gateway
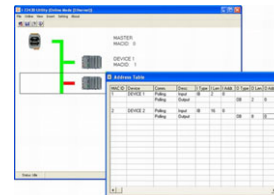
RoHS CE FC

I-7243D

Dimensions

The I-7243D from ICP DAS is a solution that provides a communication protocol transfer the DeviceNet and Modbus/TCP protocol and solves a mission-critical problem: connecting an existing DeviceNet network to Ethernet-base PLCs and PC-based configuration and monitor system. It enables DeviceNet networks to be coupled together over the Internet/Ethernet, whereby remote monitoring and control is possible. The I-7243D can be a DeviceNet master device in the CAN bus on the DeviceNet network. It is a "Predefined Master connection Set", and supports Group 2 only Server functions to communication with slave devices.

Features

- Supports maximum DeviceNet devices up to 63
- Predefined Master/Slave Connection Set
- Supports one Poll, one Bit-Strobe, one COS, one Cyclic IO connection for each DeviceNet device when connected with this module.
- Supports on-line adding device into and removing device from network
- Supports boot-up auto communicate with slave devices.
- Converters single Mobbus/TCP to multi Modbus/RTU, setting by Utility
- Supports VxComm technique for every COM ports of controllers, setting by Utility
- Allowed multi-client (or master) access simultaneously

Modbus TCP Command Support

| Function code.	Description
01 (0x01)	Read Coil Status
02 (0x02)	Read Input Status
03 (0x03)	Read Holding Registers
04 (0x04)	Read input Registers
05 (0x05)	Force Single Coils
06 (0x06)	Preset Single Register
15 (0x0F)	Force Multi Coils
16 (0x10)	Preset Multi Registers

Utility Features

- Online add/remove DeviceNet devices via Ethernet
- Online monitor and configure devices status via Ethernet.
- Get/Set Modbus/TCP input/output memory address
- Support communication mode setting.
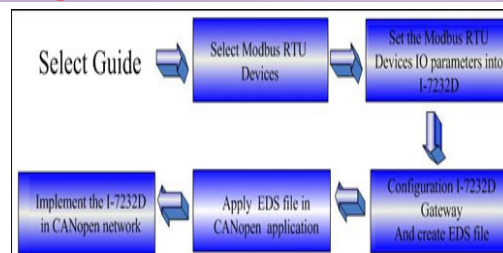- DeviceNet baud and ID configuration.

Pin Assignments
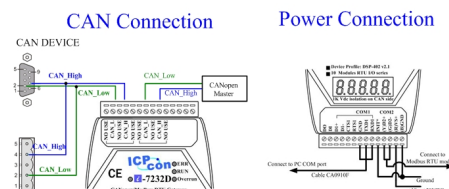
Design Flowchart

Hardware Specifications

Item	I-7243D
CPU	80186, 80MHz or compatible
Flash	512K bytes
SRAM	512K bytes
EERROM	16K bytes
Ethernet port	10/100Base-TX Ethernet Controller (Auto-negotiating, Auto_MDIX, LED indicator
Real Time Clock	Year-2000 compliance; seconds, minutes, hours, date of the month, year, valid up from 1980 to 2079
CAN Connecter	5-pin screw terminal connecter
Power Consumption	3W
COM1	RS-232: TXD, RXD, RTS, CTS, GND
COM2	RS-485: D2+, D2-
COM Speed	115200 bps max
CAN Controller	Phillips SJA1000T CAN Controller
CAN Transceiver	Phillips 82C250 CAN Transceiver
CAN baud	125K, 250K, 500K bps
LED Directors	MS, NS, RUN
CAN bus Isolated	1K VDC isolation on the CAN side
Required Supply Voltage	+10~+30VDC
Power Consumption	2.5 W
Operating Temp.	-25°C to 75°C
Storage Temp.	-40°C to 85°C
Relative Humidity	5% to 95% Non-condensing
Dimensions	122mm x 72mm x 33 mm (H x W x D)

Application
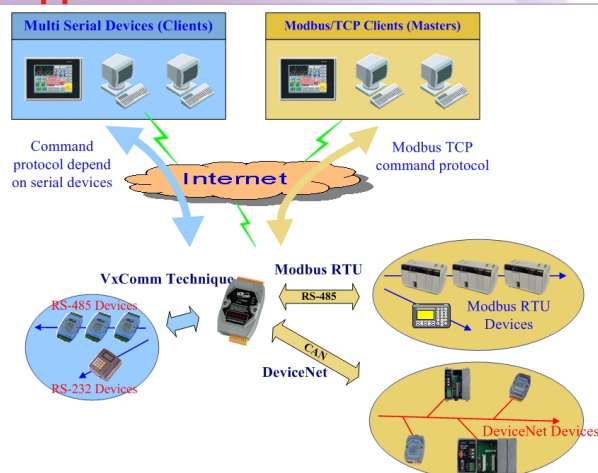
5-digit 7-segment Display
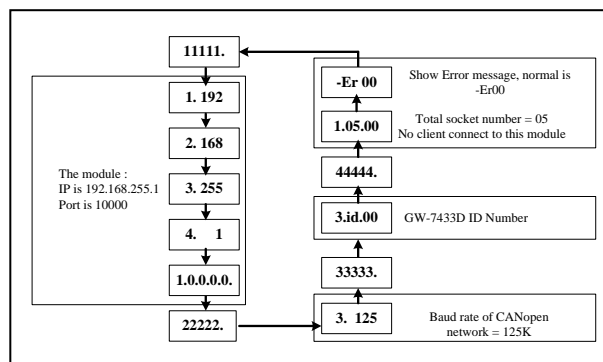
LED indicators

LED	Description
MS	This LED provides device status. It indicates whether or not the device is operating properly.
NS	This LED indicates the status of the communication link.
I/O	This LED provides information of inputs and/or outputs.

Ordering Information

I-7243D	Modbus/TCP server to DeviceNet master Gateway
I-7243D CR	Modbus/TCP server to DeviceNet master Gateway (RoHS)