

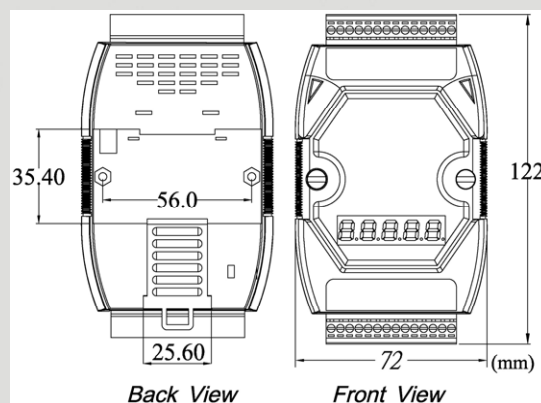


DeviceNet Series Products

DeviceNet Slave / DCON Master Gateway



I-7241D



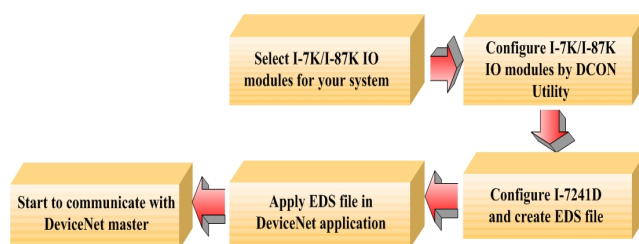
Dimensions

The I-7241D is one of CAN bus products in ICP DAS. The device offers the communication gateway between DeviceNet and DCON protocol. DCON protocol is the communication protocol of I-7K and I-87K series IO modules of ICP DAS. And the I-7241D can be a DeviceNet slave device in CAN bus for DeviceNet network. It is a “Group 2 Only Slave” device, and supports “Predefined Master/Slave Connection Set”. In addition, we also provide the utility software for users to configure the device parameters and build EDS file for the DeviceNet slave device. Users can easily apply I-7K and I-87K IO modules in DeviceNet applications with the I-7241D.

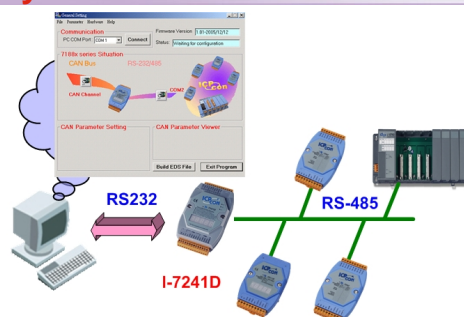
Features

- DeviceNet Version: Volume I & II, Release 2.0
- NMT: Slave
- Support Predefined Master/slave Connection Set
- Dynamic Assembly Objects Mapping
- Support Offline Connection Set, Device Heartbeat message and Device Shutdown message
- Provide Assembly object
- Dynamic Product EDS File
- I/O operating modes: Polling, Bit-Strobe, Change of State/Cyclic
- Support max 15 I-7K/I-87K IO modules
- Provide friendly Utility to configure
- Baud Rate: 125, 250, 500 kbps
- On-line change baud rate and MAC ID of CAN
- 7-segment LED to show operation mode, MAC ID, baud rate and error code

Design Flowchart



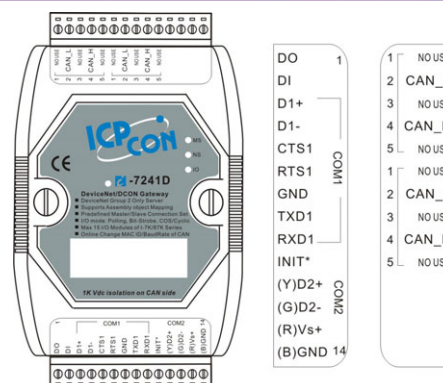
Utility Features



DCON (I-7K/I-87K Series)

- Support auto-scan I-7K/I-87K modules
- Show Application and Assembly Objects configuration
- Support IO connection path setting
- Support EDS file creating

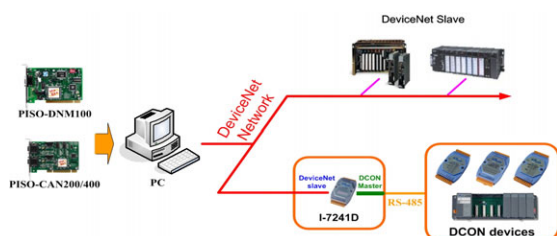
Pin Assignments



Hardware Specifications

Hardware	
CPU	80188, 40 MHz or compatible
SRAM/Flash/EEPROM	512 KB / 512 KB / 16 KB
Watchdog	Watchdog IC
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP 82C250
Connector	5-pin screwed terminal block (CAN_L, CAN_SHLD, CAN_H, N/A for others)
Isolation	1000 V _{DC} for DC-to-DC, 2500 V _{rms} for photo-couple
Terminator Resistor	Jumper for 120 Ω terminator resistor
Protocol	DeviceNet Volumn I ver2.0, Volumn II ver2.0
UART Interface	
COM 1	RS-232 (For configuration)
COM 2	RS-485 (Self-turner inside)
Transmission Distance (m)	Depend on baud rate (for example, max. 1200 m at 9.6 kbps)
Baud Rate (bps)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Protocol	DCON
LED	
Round LED	MS LED, NS LED, IO LED
5-digit 7 Segment	Yes
Power	
Power supply	Unregulated +10 ~ +30 V _{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	3W
Mechanism	
Dimensions	72mm x 33mm x 122mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 °C
Storage Temp.	-40 ~ 80 °C
Humidity	5 ~ 95% RH, non-condensing

Application



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-7241D-G	DeviceNet Slave / DCON Master Gateway
I-7241D-G CR	DeviceNet Slave / DCON Master Gateway (RoHS)