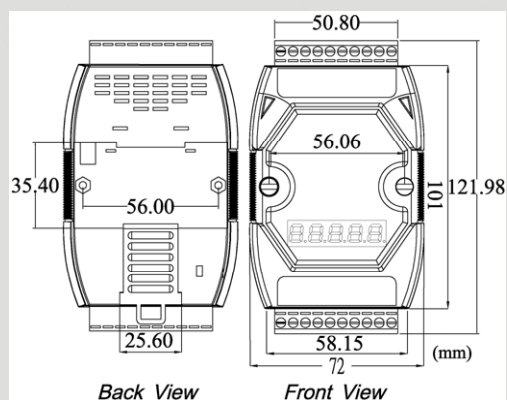


CANopen Slave/DCON Master Gateway



I-7231D



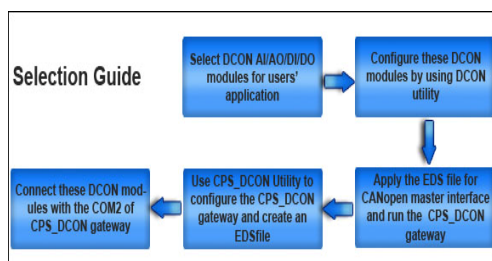
Dimensions

The I-7231D is specially designed for the slave device of CANopen protocol. It follows the CANopen Spec DS-301 V4.01 and DSP-401 V2.1, and supplies many features for users, such as dynamic PDO, EMCY object, error output value, SYNC cyclic and acyclic ... etc. The I-7231D supports up to 15 DCON modules for I/O expansion and suits with a lot of ICP DAS DI/AI/DO/AO modules. User can choose DI/DO/AI/AO modules of I-7K/I-87K series to fit the customized practice applications. In addition, we also provide I-7231D Utility to allow users to create the EDS file dynamically.

Features

- NMT: Slave
- Error Control: Node Guarding Protocol
- No. of SDOs: 1 Server, 0 Client
- No. of PDOs: default 4 TxPDO and RxPDO
- PDO Modes: Event Triggered, Remotely requested, Cyclic and Acyclic SYNC
- Emergency Message: available
- CANopen Version: DS-301 v4.01
- Device Profile: DSP-401 v2.0
- Produce EDS file Dynamically
- Run, ERR, and Overrun indicator
- Support Max 15 I-7K/I-87K series modules
- CAN Baud Rate setting by utility: 10K, 20K, 50K, 125K, 250K, 500K, 800K, 1M bps
- 7-segment LED to show Node ID, CAN baud rate and RS-485 baud rate

Design Flowchart

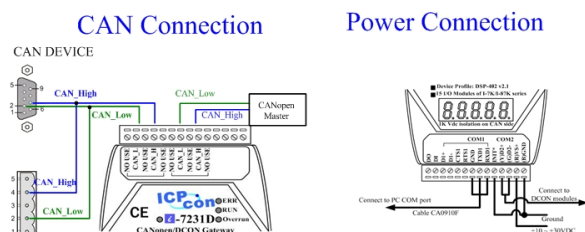


Utility Features

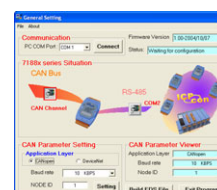


I-7231D main unit can connect to the DCON(I-7K/I-87K) IO modules to create a customized CANopen slave device and application. In order to allow user to easy apply the device on the network, ICP DAS also provides the I-7231D Utility tool to configure the IO connection path, assembly and application objects information and create the EDS file of the device.

Pin Assignments



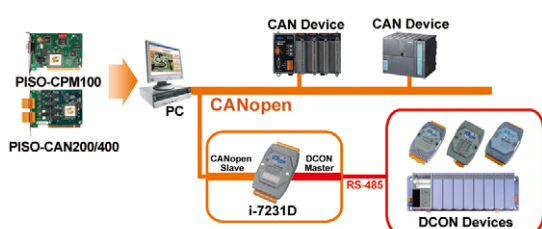
Configuration by Utility



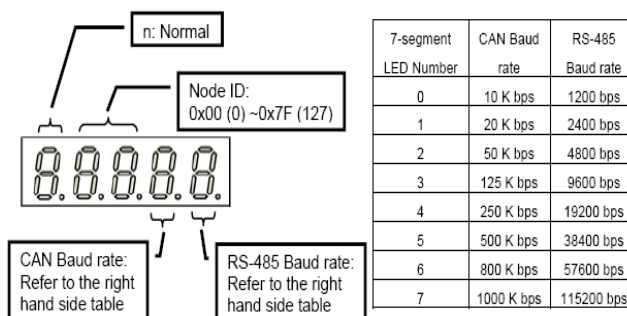
Hardware Specifications

Item	I-7231D
CPU	80188, 40MHz
SRAM	512K bytes
Flash Memory	512K bytes
EEPROM	2048 bytes
NVRAM	31 bytes
Real Time Clock	16 bit; Year-2000 compliance; seconds, minutes, hours, date of the month; month, year, valid up from 1980 to 2079
Watch Dog Timer	CPU Built-in
COM 1	RS232 : TXD,RXD,RTS,CTS,GND(Configuration port)
COM 2	RS485: D2+, D2-
CAN Controller	Phillips SJA1000T CAN Controller
CAN Transceiver	Phillips 82C250 CAN Transceiver
Isolated	2500Vrms on CAN side
Terminal Resister	120Ω terminal resister selected by jumper
Transfer Rate	up to 1Mbps
LED Indicators	Run, ERR, and Overrun
Power Requirement	+10VDC to +30Vdc
Power Consumption	3W
Operating Temp.	-25°C to 75°C
Storage Temp.	-35°C to 85°C
Humidity	5~95%
Dimensions	122mm x 72mm x 33mm (H x W x D)

Application



5-digit 7-Segment LED Display



LED indicators

LED.	Description
RUN	Indicates the status of the physical layer
ERR	Indicates the condition of the CANopen network state mechanism
OVERRUN	Indicates CAN message loading is heavy and cause buffer overrun

Ordering Information

I-7231D	CANopen Slave/DCON Master Gateway
I-7231D CR	CANopen Slave/DCON Master Gateway (RoHS)