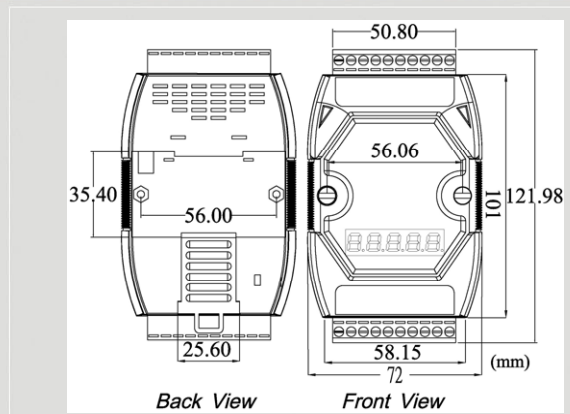


CANopen Slave/Modbus RTU Gateway



I-7232D



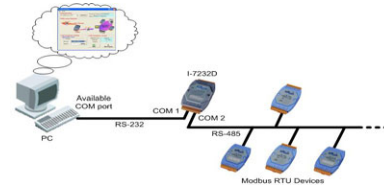
Dimensions

The I-7232D 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-7232D supports up to 10 Modbus/RTU modules for I/O expansion. User can choose DI/DO/AI/AO modules of Modbus/RTU series to fit the customized practice applications. In addition, we also provide I-7232D 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
- PDON Mapping: variable
- 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 10 Modbus RTU series modules

Utility Features

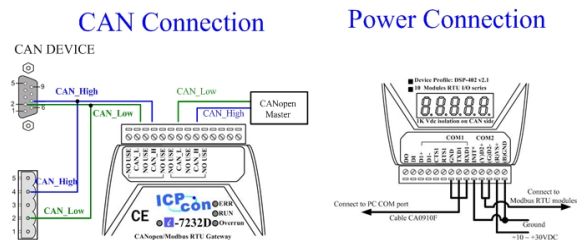


- Support CANopen node ID, baud rate setting
- Provide Modbus RTU parameters setting
- Display Modbus RTU devices configuration
- Show CANopen application objects configuration
- Produce EDS file dynamically.

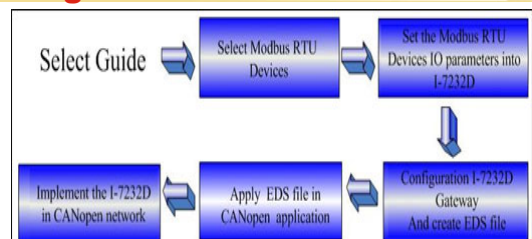
Modbus RTU Command Support

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

Pin Assignments



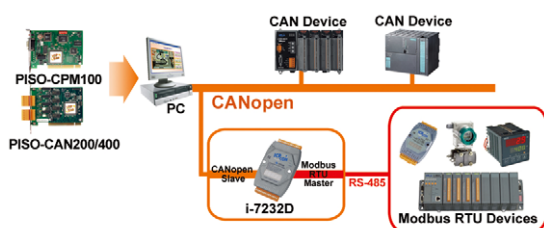
Design Flowchart



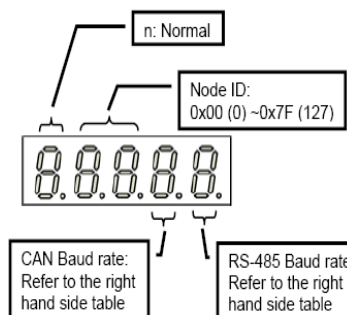
Hardware Specifications

Item	I-7232D
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-
COM baud	1200, 2400, 4800, 9600, 19200, 38400, 57600, or 115200 bps
CAN Controller	Phillips SJA1000T CAN Controller
CAN Transceiver	Phillips 82C250 CAN Transceiver
Isolated	2500Vrms on CAN bus
Terminal Resister	120Ω terminal resister selected by jumper
CAN bus Rate	10K, 20K, 50K, 125K, 250K, 500K, 800K, 1M bps
I/O Expansion	Max 10 Modbus modules
Power Requirement	+10VDC to +30Vdc
Power Consumption	3W
Operating Temp.	-25°C ~75°C
Storage Temp.	-35°C ~85°C
Humidity	5~95%
Dimensions	122mm x 72mm x 33mm (H x W x D)

Application



5-digit 7-Segment LED Display



7-segment LED Number	CAN Baud rate	RS-485 Baud rate
0	10 K bps	1200 bps
1	20 K bps	2400 bps
2	50 K bps	4800 bps
3	125 K bps	9600 bps
4	250 K bps	19200 bps
5	500 K bps	38400 bps
6	800 K bps	57600 bps
7	1000 K bps	115200 bps

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-7232D	CANopen Slave/Modbus RTU Gateway
I-7232D CR	CANopen Slave/Modbus RTU Gateway (RoHS)