![ICP DAS logo]

CANopen Series Products

16-channel Isolated DO module of CANopen Slave

CE FC

CAN-2057C

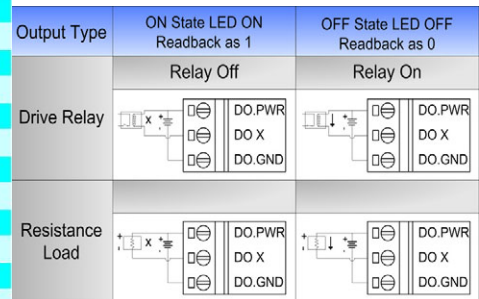### Dimensions

77.5
99
107.0
15.0
32.3
Unit: mm
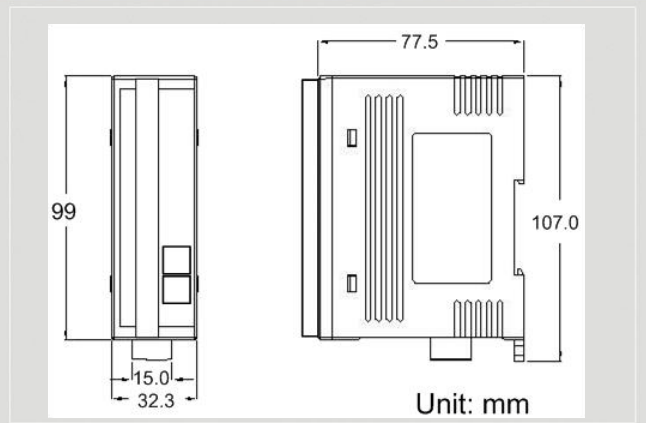
CAN-2057C module follows the DS-301 version 4.02 and DSP-401 version 2.1. CAN-2057C had passed the validation of the CiA CANopen Conformance Test tool. Therefore, users can use it with standard CANopen master easily by applying the EDS file. CAN-2057C has 16-channel isolated open collector output and it can be used to various applications, such as drive relay, resistance load and so forth. By owing to the CANopen masters of ICP DAS or other manufactory, users can quickly build a CANopen network to approach user's requirements.
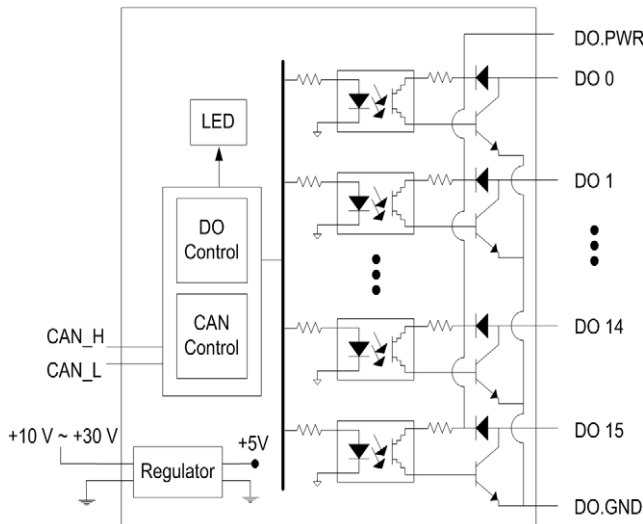
Features

- NMT Slave
- Providing I/O Pair-connection Function
- Provide default EDS file
- Passed the validation of CiA CANopen Conformance Test tool
- Support Polarity Output Setting and Save
- Support Error Value Output Setting and Save
- Support Dynamic PDO
- Support Application: Drive Relay, Resistance Load
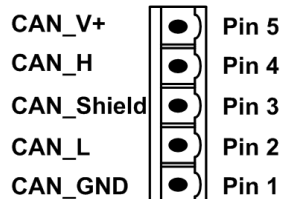- ESD Protection 4 kV Contact for each channel

Internal I/O Structure

I/O Pin & Wire Connection

Terminal No.	Pin Assignment
01	DO.0
02	DO.1
03	DO.2
04	DO.3
05	DO.4
06	DO.5
07	DO.6
08	DO.7
09	DO.8
10	DO.9
11	DO.10
12	DO.11
13	DO.12
14	DO.13
15	DO.14
16	DO.15
17	DO.GND
18	DO.GND
19	DO.PWR
20	DO.PWR

Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Drive Relay	Relay Off — DO.PWR / DO X / DO.GND	Relay On — DO.PWR / DO X / DO.GND
Resistance Load	DO.PWR / DO X / DO.GND	DO.PWR / DO X / DO.GND

CAN Pin & Baud Rate Rotary

Baud rate rotary switch

CAN_V+	Pin 5	
CAN_H	Pin 4	
CAN_Shield	Pin 3	
CAN_L	Pin 2	
CAN_GND	Pin 1	

Switch Value	Pair-connection	Baud Rate
0	8	10 kbps
1	9	20 kbps
2	A	50 kbps
3	B	125 kbps
4	C	250 kbps
5	D	500 kbps
6	E	800 kbps
7	F	1000 kbps

Hardware Specifications

CAN Interface

Connector	5-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+)
Baud Rate (bps)	10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M
Terminator Resistor	Switch for 120 Ω terminator resistor
Node ID	1~99 selected by rotary switch
Protocol	CANopen DS-301 ver4.02, DS-401 ver2.1
No. of PDOs	10 Rx, 10 Tx (support dynamic PDO)
PDO Mode	Event Triggered, Remotely requested, Cyclic and acyclic SYNC
Error Control	Node Guarding protocol and Heartbeat Producer protocol
Emergency Message	Yes

Digital Output

Channels	16 (Sink)
Output Type	Open-collector
Reaction Time	150 us
Max Load Current	100 mA per channel
Load Voltage	+5 ~ +30 V_{DC}
Intra-module Isolation	3750 Vrms
ESD Protection	4 kV Contact for each channel

LED

Round LED	PWR LED, RUN LED, ERR LED
I/O LED	16 LEDs as Digital Output, and 1 LED as terminal resister indicator

Power

Input range	Unregulated +10 ~ +30 V_{DC}
Power Consumption	1.5 W

Mechanism

Installation	DIN-Rail
Dimensions	32.3 mm x 99 mm x 77.5 mm (W x L x H)

Environment

Operating Temp.	-25 ~ +75 ℃
Storage Temp.	-30 ~ +80 ℃
Humidity	10 ~ 90% RH, non-condensing

Applications
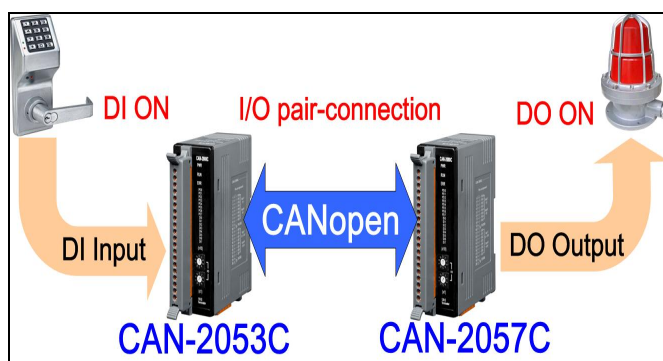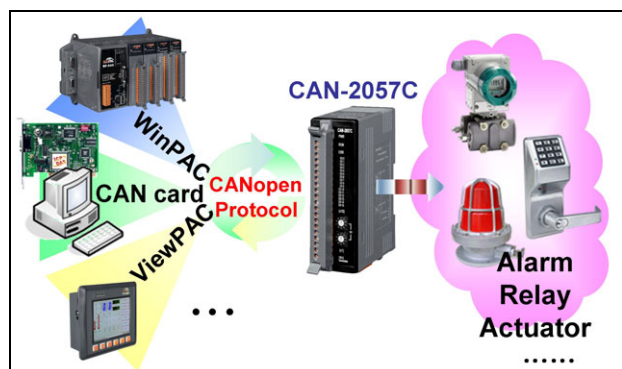
Ordering Information

CAN-2057C	CANopen module of 16-channel Isolated Open-collector Digital Output