

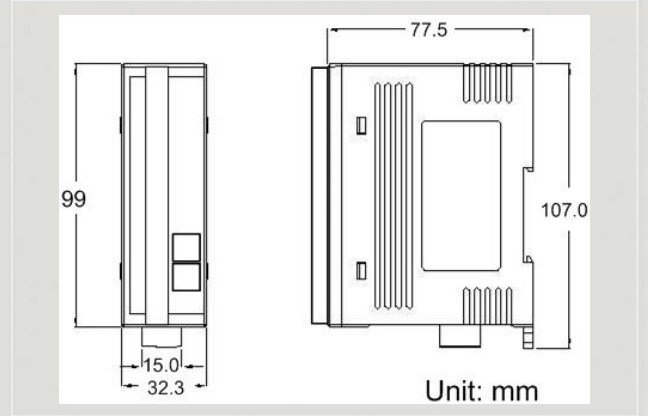


# CANopen Series Products

## 8-ch DI & 8-ch DO module of CANopen Slave



CAN-2054C



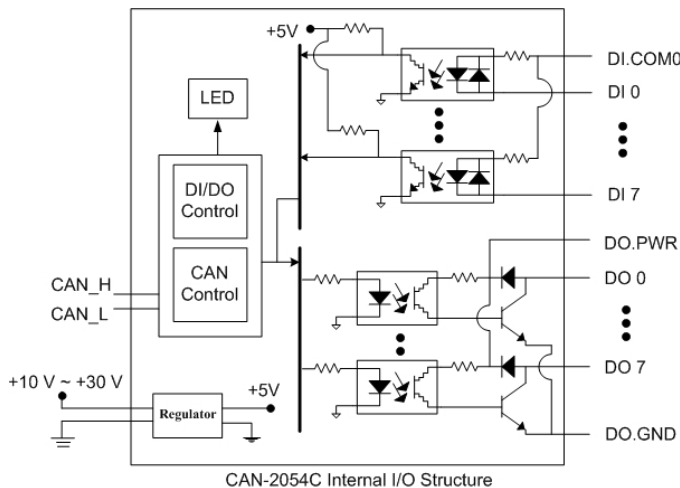
Dimensions

CAN-2054C module follows the CiA DS-301 version 4.02 and DSP-401 version 2.1. You can access the digital I/O status and set the configuration by using standard CANopen protocol. CAN-2054C has passed the validation of the CiA CANopen conformance test tool. Therefore, you can use it with standard CANopen master easily by applying the EDS file. CAN-2054C has 8 isolated sink/source input channels and 8 isolated sink output channels. It can be used to various applications, such as PNP, NPN, TTL, relay contact and so forth. By owing to the CANopen masters of ICP DAS, you can quickly build a CANopen network to approach your requirements.

### Features

- NMT Slave
- Providing Pair-Connect function
- Provide default EDS file
- ESD Protection 4 KV Contact for each channel
- Support Power Supply +10 ~ +30 V<sub>DC</sub>
- Support CiA DS-301 v4.02, DSP-401 v2.1
- Support PDO Mapping

### Internal I/O Structure



### I/O Pin & Wire Connection

Terminal No.	Pin Assignment	Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
01	DI.COM	Relay Contact	Relay On	Relay Off
02	DI0		DI.COM DI X	DI.COM DI X
03	DI1		Relay Close	Relay Open
04	DI2		Voltage > 10 V	Voltage < 4 V
05	DI3	TTL/CMOS Logic	Logic Power Logic Level Low	Logic Power Logic Level Low
06	DI4		DI.COM DI X	DI.COM DI X
07	DI5	NPN Output	Open Collector On	Open Collector Off
08	DI6		DI.COM DI X	DI.COM DI X
09	DI7	PNP Output	Open Collector On	Open Collector Off
10	DO0		DI.COM DI X	DI.COM DI X
11	DO1	Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
12	DO2		Relay Off	Relay On
13	DO3		DO.PWR DO X DO.GND	DO.PWR DO X DO.GND
14	DO4		Resistance Load	Resistance Load
15	DO5	Drive Relay	DO.PWR DO X DO.GND	DO.PWR DO X DO.GND
16	DO6		DO.PWR DO X DO.GND	DO.PWR DO X DO.GND
17	DO7	Resistance Load	DO.PWR DO X DO.GND	DO.PWR DO X DO.GND
18	DO.GND		DO.PWR DO X DO.GND	DO.PWR DO X DO.GND
19	DO.GND		DO.PWR DO X DO.GND	DO.PWR DO X DO.GND
20	DO.PWR			

### Node ID & Baud rate DIP Switch

CAN\_V+ Pin 5  
CAN\_H Pin 4  
CAN\_Shield Pin 3  
CAN\_L Pin 2  
CAN\_GND Pin 1

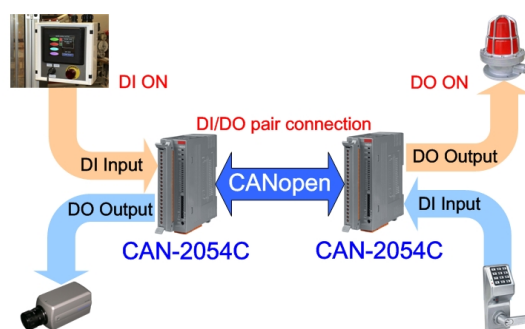
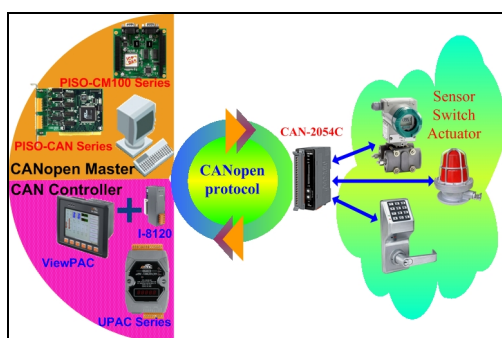
Baud rate rotary switch

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
Terminal Resistor	Switch for 120 Ω terminal 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 Input	
Channels	8 (Sink / Source)
On Voltage Level	+3.5 ~ +30 V <sub>DC</sub>
Off Voltage Level	+1 V <sub>DC</sub> Max.
Response Time	250 us
ESD Protection	4 kV Contact for each channel
Digital Output	
Channels	8 (Sink)
Load Voltage	+5 ~ +30 V <sub>DC</sub>
Output Type	Open-Collector
Reaction Time	200 us
LED	
Round LED	PWR LED, RUN LED, ERR LED
I/O LED	8 LEDs for DI and DO individually, and 1 LED as terminal resistor indicator
Power	
Input range	Unregulated +10 ~ +30 V <sub>DC</sub>
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 °C
Storage Temp.	-30 ~ +80 °C
Humidity	10 ~ 90% RH, non-condensing

## Applications



## Ordering Information

<b>CAN-2054C</b>	CANopen module of 8-channel Digital Input and 8-channel Digital Output
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