

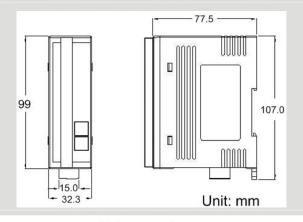
# **CANopen Series Products**

## 16-channel Isolated DI module of CANopen Slave

CE FC



CAN-2053C



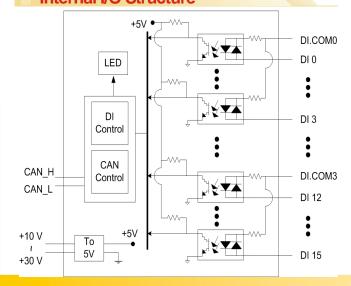
**Dimensions** 

CAN-2053C module follows the DS-301 version 4.02 and DSP-401 version 2.1 and it 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-2053C has 16-channel isolated sink/source input and 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 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 Input Setting and Save.
- Support Dynamic PDO.
- Support Application: PNP, NPN, TTL, and Relay Contact
- ESD Protection 4 kV Contact for each channel

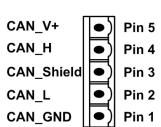
#### Internal I/O Structure



#### **I/O Pin & Wire Connection**

Terminal No.	Pin Assignment DI.COM	Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
02	DI.0			
[ 03	DI.1	Relay Contact	Relay On	Relay Off
[ o ] 04	DI.2		+ DI.COM DI X	+ DI.COM
[ 05	DI.3			
[ 06	DI.COM			
[4]	DI.4	TTL/CMOS	Voltage > 10 V	Voltage < 4 V
U	DI.5		Logic Power DH.COM DI.COM	Logic Power  Logic Level Low  DI.COM  DIX
V	DI.6			
U	DI.7	3		
[4]	DI.COM			
V	DI.8		Open Collector On Open Collector Off	
K	DI.9	NPN	DI.COM	
٧	DI.10	Output		OFF! A -
[/]	DI.11			
- V	DI.COM	PNP Output	Open Collector On	Open Collector Off
l/	DI.12		Open concetor on	Open Concetor Off
(v)	DI.13		ION I I IOFFI	DI.COM
V	DI.14			OFF □ DI X
[ 20	DI.15			

### CAN Pin & Baud Rate Rotary





Switch	connection	Baud Rate
0	8	10 kbps
1	9	20 kbps
2	Α	50 kbps
3	В	125 kbps
4	С	250 kbps
5	D	500 kbps
6	E	800 kbps
7	F	1000 kbps



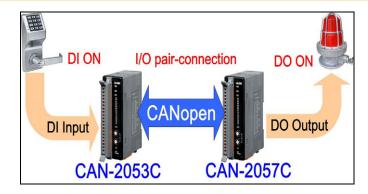


## Hardware Specifications

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 $\Omega$ 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		
DI Interface			
Channels	16 (Sink/Source)		
ON Voltage Level	$+3.5 \sim +30 \text{ V}_{DC}$		
OFF Voltage Level	+1 V <sub>DC</sub> Max.		
Input Impedance	3 kΩ, 0.3 W		
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 Input, and 1 LED as terminal resister indicator		
Power			
Input range	Unregulated $+10 \sim +30 \text{ V}_{DC}$		
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 °C		
Storage Temp.	-30 ~ +80 °C		
Humidity	10 ~ 90% RH, non-condensing		

## Applications





## Ordering Information

CAN-2053C CANopen module of 16-channel Isolated Sink/Source Digital Input.