DeviceNet Series Products

Digital Input and Output module of DeviceNet Slave
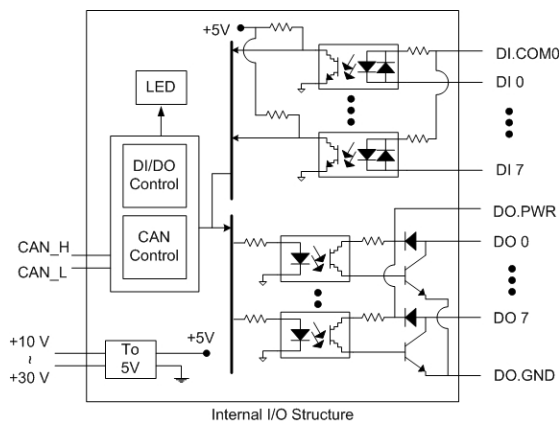
CE FC

CAN-2054D

Dimensions

Unit: mm
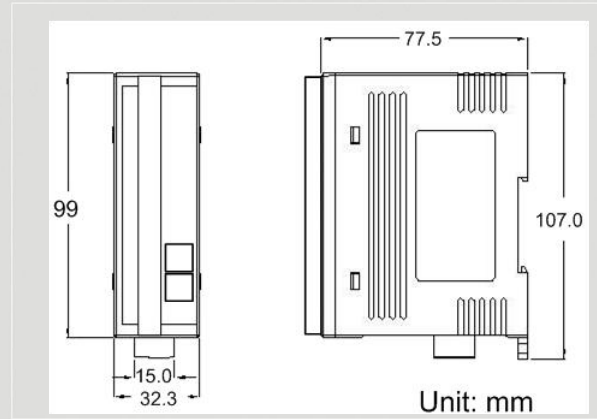
The CAN-2054D follows DeviceNet specification Volume I/II, Release 2.0. User can access the digital I/O status and set the configuration via DeviceNet EDS file. This module has 8-channel isolated sink/source input and 8-channel isolated sink output. It can be applied to various applications, such as PNP, NPN, TTL, relay contact and so forth. By owing to the DeviceNet masters of ICP DAS, you can quickly build a DeviceNet network to approach your requirements.

Features

- DeviceNet general I/O slave devices.
- Comply with DeviceNet specification Volume I, Release 2.0 & Volume II, Release 2.0, Errata 5
- Group 2 Only Server (non UCMM-capable)
- Support Predefined Master/Slave Connection Set
- Connection supported:
  - 1 connection for Explicit Messaging
  - 1 connection for Polled I/O
  - 1 connection for Bit-Strobe I/O connection
- Support DeviceNet heartbeat and shutdown messages
- Provide EDS file for DeviceNet master interface.

Block Diagram

Internal I/O Structure

I/O Pin & Wire Connection

Terminal No.	Pin Assignment
01	DI.COM
02	DI0
03	DI1
04	DI2
05	DI3
06	DI4
07	DI5
08	DI6
09	DI7
10	DO0
11	DO1
12	DO2
13	DO3
14	DO4
15	DO5
16	DO6
17	DO7
18	DO.GND
19	DO.GND
20	DO.PWR

Input Type	ON State LED ON Readback as 0	OFF State LED OFF Readback as 1
Relay Contact	Relay On	Relay Off
TTL/CMOS Logic	Voltage > 3.5 V	Voltage < 1 V
NPN Output	Open Collector On	Open Collector Off
PNP Output	Open Collector On	Open Collector Off

Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Drive Relay	Relay On	Relay Off
Resistance Load		

Node ID & Baud rate DIP Switch

Baud Rotary switch

Switch Value	Baud Rate
0	125 kbps
1	250 kbps
2	500 kbps

Hardware Specifications

CAN Interface	
DeviceNet Specification	Volume I, Release 2.0 & Volume II, Release 2.0, Errata 5
DeviceNet subscribe	Group 2 Only Server
Connection supported	1 connection for Explicit Messaging 1 connection for Polled I/O 1 connection for Bit-Strobe I/O
Node ID	0~63 selected by rotary switch
Baud Rate (bps)	125 kbps, 250 kbps, 500 kbps
Heartbeat/Shutdown message	Yes
Terminator Resistor	Switch for 120 Ω terminator resistor

Digital Input	
Channels	8 (Sink/Source)
On Voltage Level	+3.5 ~ +30 V_{DC}
Off Voltage Level	+1 V_{DC} Max.
Input Impedance	3 kΩ, 0.3 W

Digital Output	
Channels	8 (Sink)
Load Voltage	+5 ~ +30 V_{DC}
Output Max Load Current	700 mA per channel
Output Type	Open Collector

LED	
Round LED	PWR LED, NET LED, MOD LED
I/O LED	8 LEDs as PWM, 8 LEDs as Digital Input, 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 ℃
Humidity	10 ~ 90% RH, non-condensing

Applications
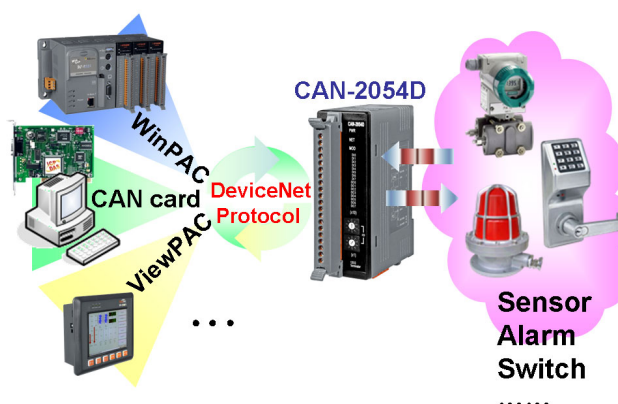
Ordering Information

CAN-2054D	The DeviceNet module of 8-channel Digital Input and 8-channel Digital Output.