



**CAN-2054D** 

Digital Input and Output Module of DeviceNet Slave

#### **■** 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



### **■** Introduction

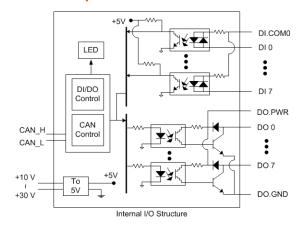
The CAN-2054D follows DeviceNet specification Volume I/II, Release 2.0. User can access the digital I/O status and set the configuration via DeviceNet EDS file. This module has 8-channel isolated sink/source input and 8-channel isolated sink output. It can be applied to various applications, such as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

### **■ 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		
Terminal Resistor	Switch for 120 $\Omega$ terminal resistor		
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.		
Input Impedance	3 kΩ, 0.3 W		
Digital Output			
Channels	8 (Sink)		
Load Voltage	+5 ~ +30 V <sub>DC</sub>		
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 Digital Output, 8 LEDs as Digital Input, and 1 LED as terminal resister indicator		
Power			
Input range	Unregulated +10 ~ +30 V <sub>DC</sub>		
Power Consumption	1.5 W		
Mechanism			
Installation	DIN-Rail 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		

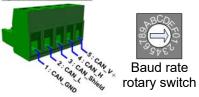
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## **■ Internal I/O Structure**



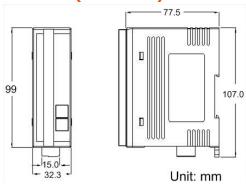
# **■ CAN Pin & Baud Rate Rotary**

#### 5-pin screw terminal block



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

# **■** Dimensions (Units: mm)



### **■ I/O Pin & Wire Connection**

Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Relay Contact	Relay On	Relay Off
	+ DI.COM DI X	+ □ □ □ DI.COM □ DI X
TTL/CMOS Logic	Voltage > 3.5 V	Voltage < 1 V
	Logic Power  Couloid Level Low  Logic Level Low  DI X	Logic Power  Colored High  DI.COM  DI X
NPN Output	Open Collector On	Open Collector Off
	DI.COM DI X	DI.COM DI X
PNP Output	Open Collector On	Open Collector Off
	DI.COM DI X	□ DI.COM DI X

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

# **■ Application**



### Ordering Information

CAN-2054D CR	The DeviceNet module of 8-channel Digital Input and 8-channel Digital Output (RoHS)

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