CAN-2022C

CANopen Slave Module with 2-channel Isolated AI, 2-channel Isolated AO, 4-channel Isolated DI, 4-channel Isolated DO

Features

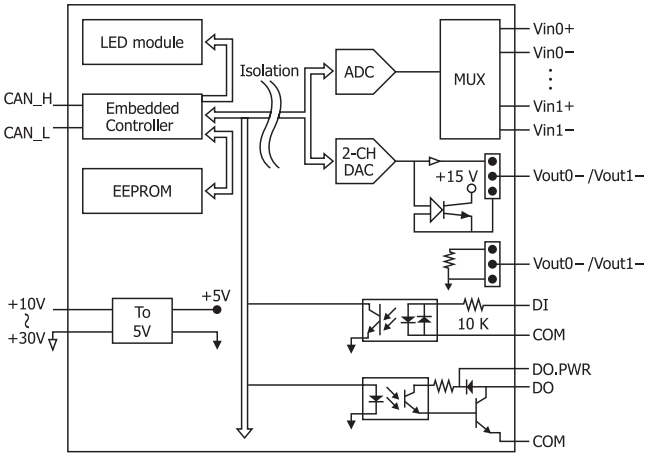
- NMT Slave
- Passed the validation of CiA CANopen Conformance Test tool
- ESD Protection 4KV Contact for each channel
- Support Power supply 10 ~30 VDC
- Support CiA-301 v4.02, CiA-401 v2.1
- Provide default EDS file

Introduction

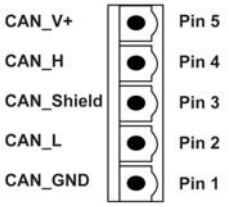
CANopen is one kind of the network protocols based on the CAN bus and mainly used for embedded network of machine control, such as industrial machine control , aircraft engines monitoring, factory automation, medical equipment control, remote data acquisition, environmental monitoring, and packaging machines control, etc.

CAN-2022C module follows the CiA-301 version 4.02 and CiA-401 version 2.1. You can access the analog/digital I/O status and set the configuration by using standard CANopen protocol. CAN-2022C 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-2022C has 2 analog input channels, 2 analog output channels, 4 digital input channels and 4 digital output channel. By owing to the CANopen masters of ICP DAS, you can quickly build a CANopen network to approach your requirements.

Internal I/O Structure



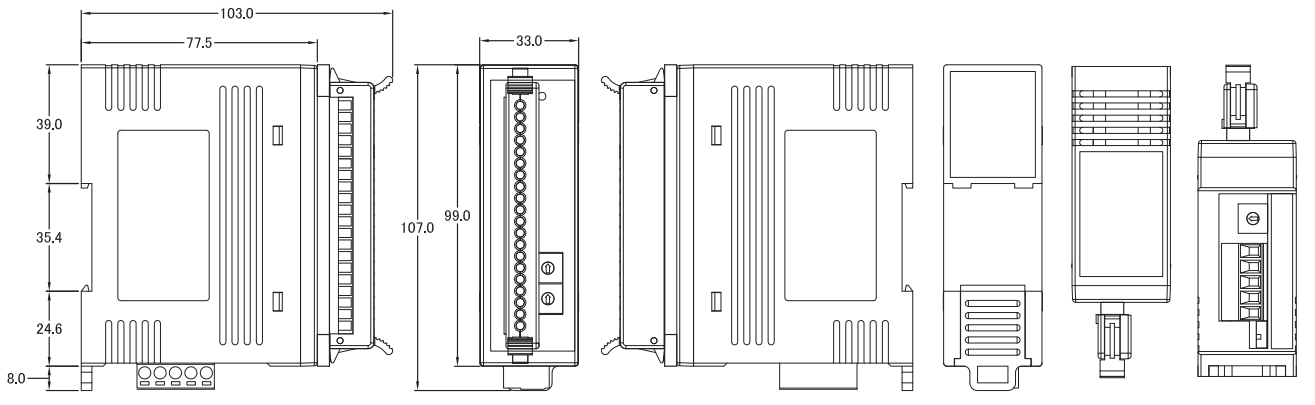
CAN Pin & Baud Rate Rotary



Baud rate rotary switch

Switch	Baud Rate
0	10 kbps
1	20 kbps
2	50 kbps
3	125 kbps
4	250 kbps
5	500 kbps
6	800 kbps
7	1000 kbps

Dimensions (Units: mm)

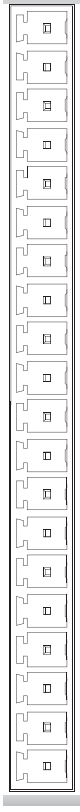


Left View | Front View | Right View | Rear View | Top View | Bottom View

Specifications

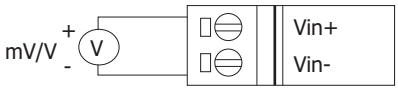
CAN Interface	
Connector	5-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+)
Baud Rate(bps)	10k,20k,50k,125k,250k500k,800k,1M
Terminal Resistor	Switch for 120Ω terminal resistor
Node ID	1~99 selected by rotary switch
Protocol	CANopen CiA301 ver4.02,CiA-401 ver2.1
No. of PDOs	10Rx,10Tx(Support Dynamic PDO)
PDO Mode	Event Triggered,Remotely requested,Cyclic and acyclic SYNC
Power	
Input range	Unregulated +10 ~ +30 VDC
Power Consumption	1.8W
LED	
Round LED	PWR LED, RUN LED, ERR LED
I/O LED	2 LEDs as Analog Input,2 LEDs as Analog Output,4 LEDs as Digital Input, 4 LEDs as Digital Output,and 1 LED as terminal resister indicator
Mechanism	
Dimensions	33 mm x 99 mm x78 mm(WxLxH)
Environment	
Operating Temp	-25 ~ 75 °C
Storage Temp	-30 ~ 80 °C
Humidity	5~ 95% RH, non-condensing
Analog Input	
Input Channels	2(Differential)
Input Type	±10V, ±5V, ±2.5V, ±1.25V, ±1V, ±500mV, ±250mV
Sampling Rate	60 Samples/Sec.(Total)
Zero Drift	+/-10 uV/°C
Span Drift	+/-25 ppm/ °C
Common Mode Rejection	86 dB Min
Normal Mode Rejection	100 dB
Resolution	16-bit
Over voltage protection	240 Vrms
Individual channel configuration	Yes
Analog Output	
Output channels	2
Output Type	+0V ~ +5V, +/-5V, +0 V ~ +10V,+/-10V
Resolution	12-bit
Accuracy	+/-0.1% of FSR
Voltage Output Capability	10 V @ 20 mA
Current Load Resistance	500 Ω
Power-on value	Yes
Safe value	Yes
Digital Output	
Output channels	4
Output Type	Isolated Open Collector(Sink)
Max Load currrent	700 Ma/channel Max.
Load Voltage	+3.5 VDC ~ +50 VDC
Over voltage protection	60VDC
Overload protection	Yes
Short Circuit protect	Yes
Power-on value	Yes,Programmable
Safe value	Yes,Programmable
Digital Input	
Input channels	4
Input Type	Wet contact(Sink)
On Voltage Level	+3.5 VDC ~ 30 VDC
Off Voltage Level	+1 VDC Max.
Input Impedance	10 KΩ, 0.66W
Over voltage protection	70VDC

Pin Assignments



Terminal No.	Pin Assignment
01	Vin0+
02	Vin0-
03	Vin1+
04	Vin1-
05	Vout0+
06	Vout0-
07	Vout1+
08	Vout1-
09	N/A
10	N/A
11	DI0
12	DI1
13	DI2
14	DI3
15	COM
16	DO0
17	DO1
18	DO2
19	DO3
20	GND

Wire Connections

<table>
<tr><td colspan="3">Voltage Input</td></tr>
<tr><td colspan="3"> 
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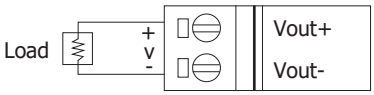
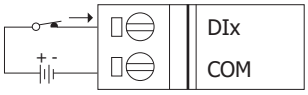
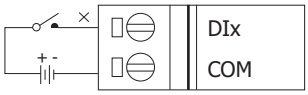
<tr><td colspan="3">Voltage Output</td></tr>
<tr><td colspan="3"> 
</td></tr>
<tr><td>Digital Input/Cpimter</td><td>ON State
Readback as 1</td><td>OFF State
Readback as 0</td></tr>
<tr><td>Wet Contact
(Sink)</td><td> 
</td><td> 
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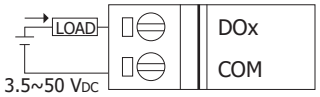
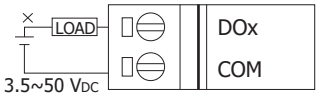
<tr><td>Digital Output</td><td>ON State
Readback as 1</td><td>OFF State
Readback as 0</td></tr>
<tr><td>Open Collector
(Sink)</td><td> 
</td><td> 
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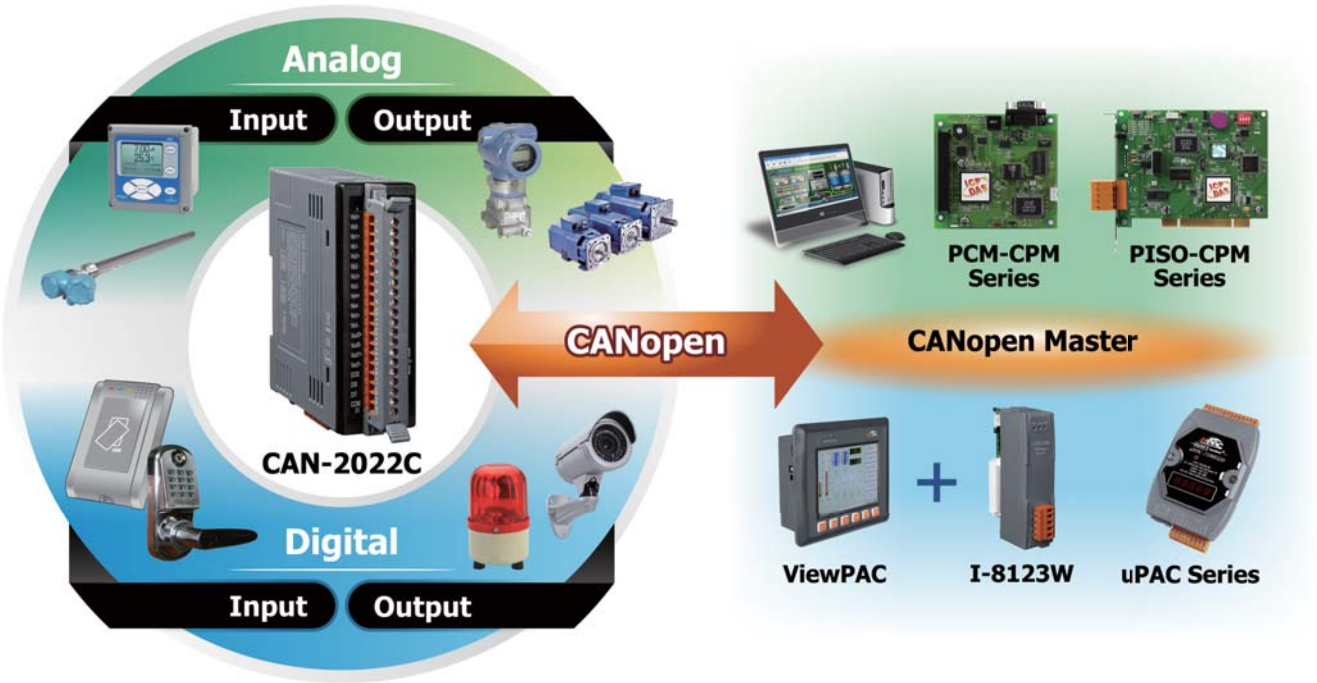
Applications



Ordering Information

CAN-2022C CR	CANopen Slave Module with 2-channel Isolated AI, 2-channel Isolated AO, 4-channel Isolated DI, 4-channel Isolated DO (RoHS)