

CAN-2054C Quick Start

[Package List]



CAN-2054C



Software CD



Screw Driver
(1C016)



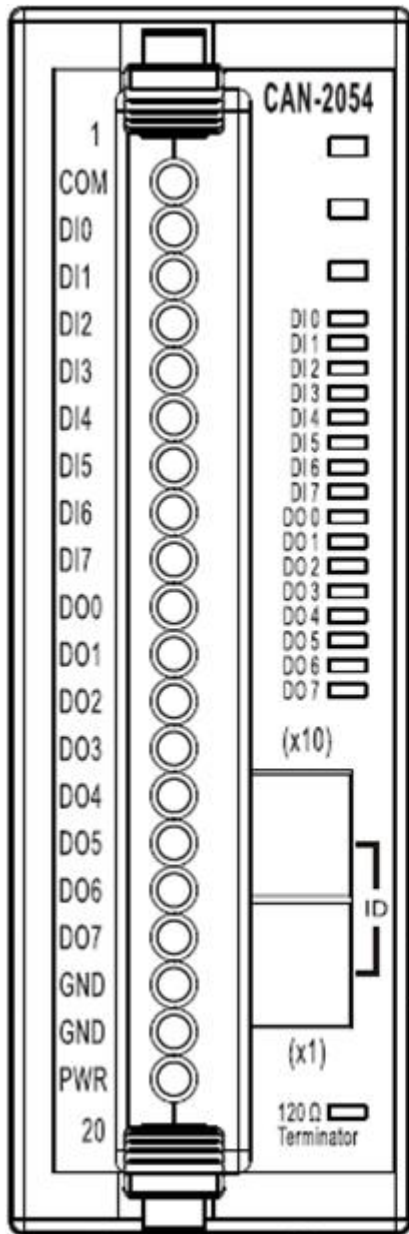
Quick Start

Hardware Specification

CAN Interface	
CANopen Specification	CiA DS-301 v4.02, DS-401 v2.1
Node ID	1~99 selected by rotary switch
Baud Rate (bps)	10k, 20k, 50, 125k, 250k, 500k, 800k and 1M
Error Control	Node Guarding protocol and Heartbeat Producer protocol
Terminator Resistor	Switch for 120 Ω terminator resistor
Connector	5-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+)
Digital Input	
Channels	8 (Sink/Source)
On Voltage Level	3.5 ~30 V _{DC}
Off Voltage Level	1 V _{DC} Max.
ESD Protection	+/-4 kV, Contact for each channel
Digital Output	
Channels	8 (Sink)
Load Voltage	5 ~ 30 V _{DC}
Max. Load Current	700 mA per channel
Reaction Time	200 us
Power	
Input range	Unregulated +10 ~ +30 V _{DC}
Environment	
Operating Temp.	-25 ~ 75 °C
Humidity	10 ~ 90% RH, non-condensing

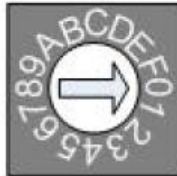
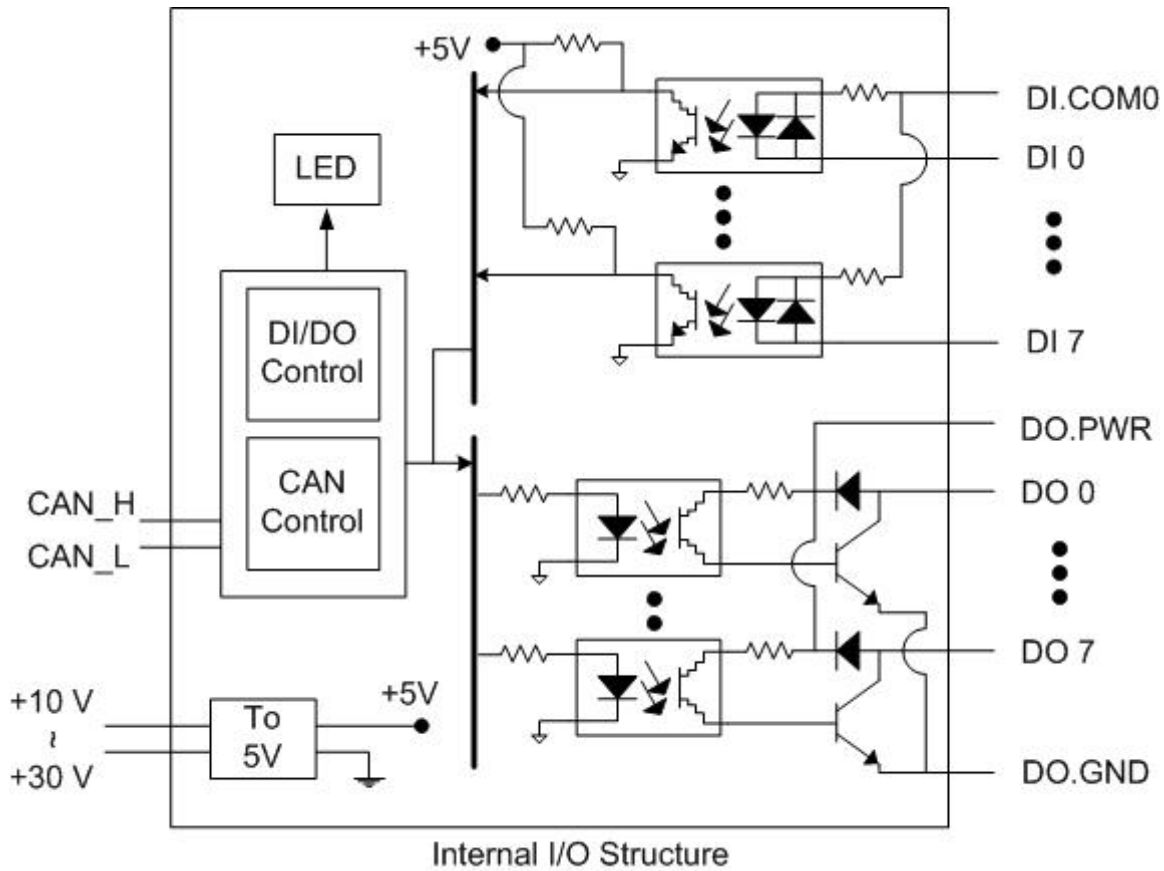
For more information about CAN-2054C, please visit the following website:
http://www.icpdas.com/products/Remote_IO/can_bus/can-2054c.htm

CAN-2054C Pin Assignments



Terminal No.	Pin Assignment
01	DI.COM
02	DI.0
03	DI.1
04	DI.2
05	DI.3
06	DI.4
07	DI.5
08	DI.6
09	DI.7
10	DO.0
11	DO.1
12	DO.2
13	DO.3
14	DO.4
15	DO.5
16	DO.6
17	DO.7
18	DO.GND
19	DO.GND
20	DO.PWR

CAN-2054C Internal I/O Structure

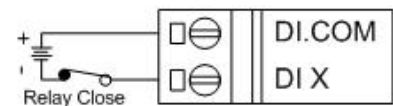
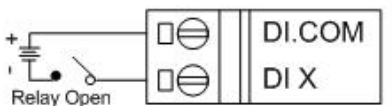
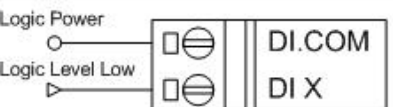

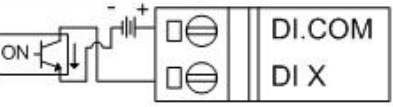
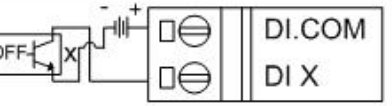
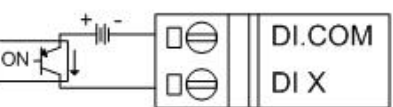
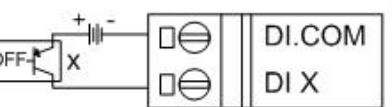


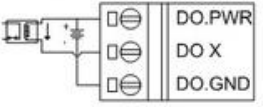
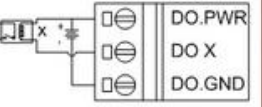
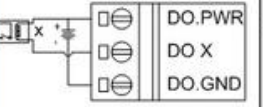
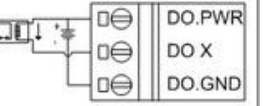
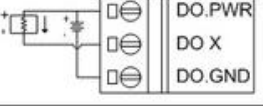
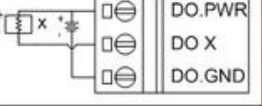
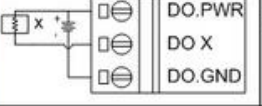
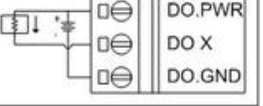
Baud rate rotary switch

Rotary Switch Value	Baud rate (k BPS)
0	10
1	20
2	50
3	125
4	250
5	500
6	800
7	1000

Baud rate and rotary switch

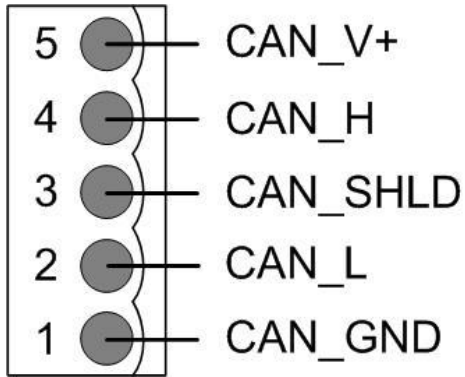
CAN-2054C Wiring Connection Type

Module Name	CAN-2054C / CAN-2054D	
Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
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
		

Module Name	CAN-2054D		CAN-2054C	
Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Drive Relay	Relay On	Relay Off	Relay Off	Relay On
				
Resistance Load				

Note: When connecting to a current source, an optional external 125-Ohm precision resistor is required.

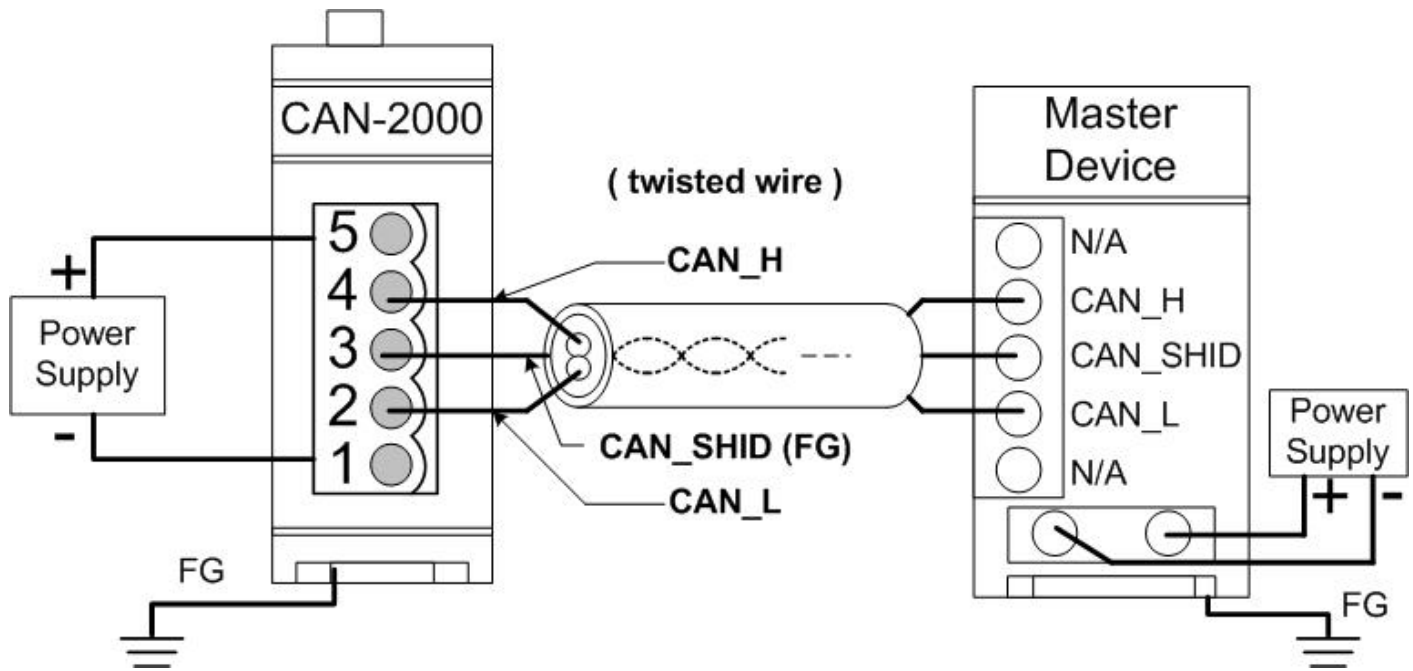
CAN-2054C CAN Bus Wire Connection



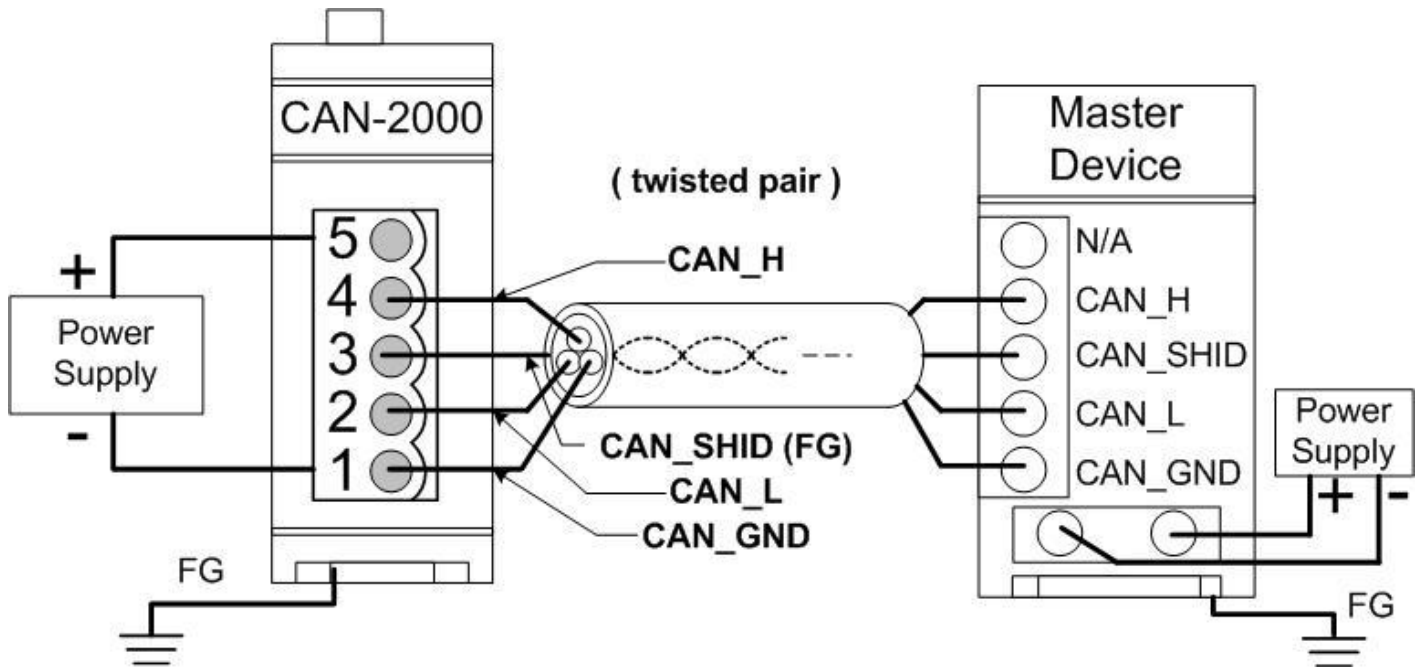
Pin	Signal	Description
5	CAN_V+	Power positive
4	CAN_H	Signal high of CAN Bus line
3	CAN_SHLD	Cable Shield (FG)
2	CAN_L	Signal low of CAN Bus line
1	CAN_GND	CAN ground

* CAN_SHID (FG) is Optional.

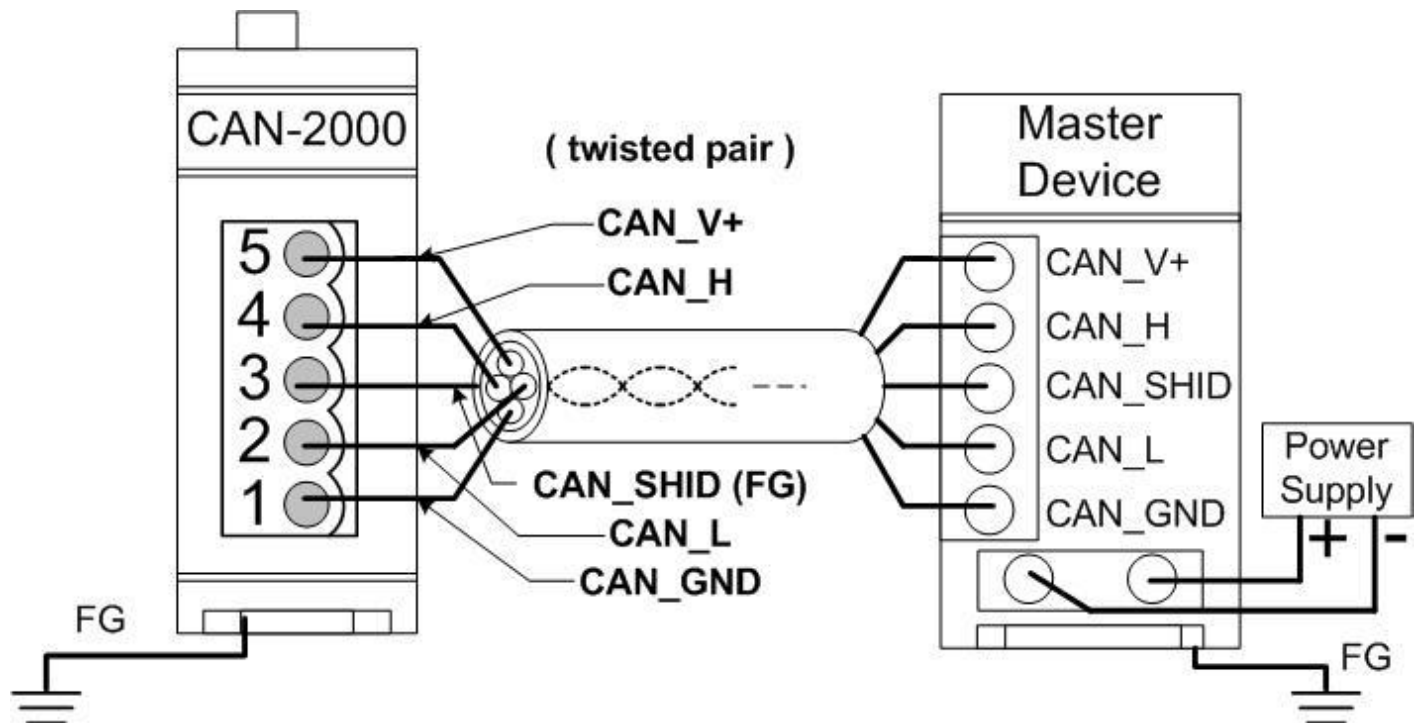
2-Wire Connection



3-Wire Connection

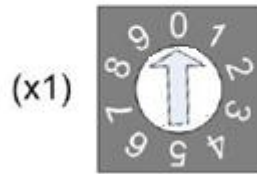
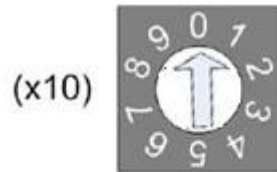


4-Wire Connection (The CAN-2000 is powered by the master device)



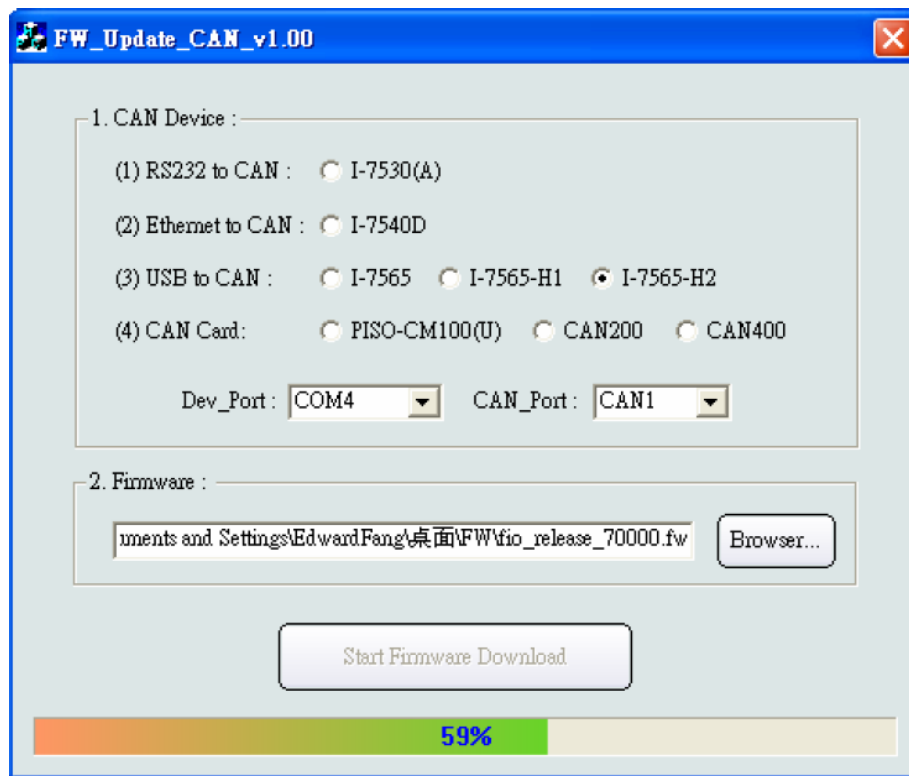
CAN-2054C Firmware Update

Step 1 – Set Module to “Bootloader” mode (set Node ID to 00). Then power on the module.



Node ID rotary switch

Step 2 – Run FW_Update_CAN Utility



(FW_Update_CAN Utility)

[1] CAN Device :

The below ICP DAS CAN products are supported by FW_Update_CAN utility for firmware update.

- (1) RS232 to CAN : I-7530
- (2) Ethernet to CAN : I-7540D
- (3) USB to CAN : I-7565, I-7565-H1, I-7565-H2
- (4) CAN Card : PISO-CM100(U),
PISO-/PCM-/PEX-CAN200 / CAN400

Before firmware update, users need to set the below parameters.

- (1) Select CAN hardware interface
- (2) set Dev_Port or Board_ID
- (3) set CAN_Port” number

[2] Download Firmware :

- (1) Click “**Browser...**” button to choose firmware file, can_2054c_xx.fw.
- (2) Click “**Start Firmware Update**” button to start firmware update and it will show the total percentage of firmware update in progress bar. After the firmware update finished, it will show the “Firmware Update Success !!” message.



CAN-2054C firmware Download:

ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/canopen/slave/can-2000c/can-2054c/

FW_Update_CAN Utility Download:

ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/canopen/slave/can-2000c/tools/