

# CAN-2019C Quick Start

## [ Package List ]



CAN-2019C



Software CD



Screw Driver  
(1C016)



Quick Start

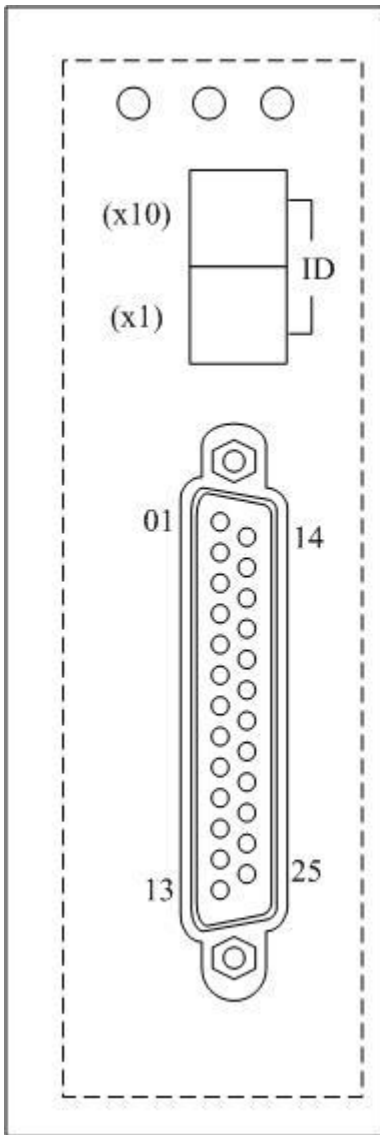
## Hardware Specification

<b>CAN Interface</b>	
CANopen Specification	CiA-301 v4.02, CiA -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 $\Omega$ terminator resistor
Connector	5-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+)
<b>Analog Input</b>	
Channels	10
Input Type	Voltage : $\pm 15$ mV, $\pm 50$ mV, $\pm 100$ mV, $\pm 500$ mV, $\pm 1$ V, $\pm 2.5$ V, $\pm 5$ V, $\pm 10$ V Current : $\pm 20$ mA (External resistor is required) Thermocouple : J, K, T, E, R, S, B, N, C
Resolution	16-bit
Accuracy	$\pm 0.1\%$ FSR
Sampling Rate	10 Hz (Total)
Overvoltage protection	240 Vrms
<b>Power</b>	
Input range	Unregulated +10 ~ +30 V <sub>DC</sub>
Power Consumption	1.5W
<b>Environment</b>	
Operating Temp.	-25 ~ 75 $^{\circ}$ C
Humidity	10 ~ 90% RH, non-condensing

For more information about CAN-2019C, please visit the following website:  
[http://www.icpdas.com/products/Remote\\_IO/can\\_bus/CAN-2019C.htm](http://www.icpdas.com/products/Remote_IO/can_bus/CAN-2019C.htm)

CAN-2019C Quick Start Ver. 1.20, Apr/2017

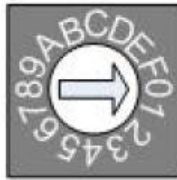
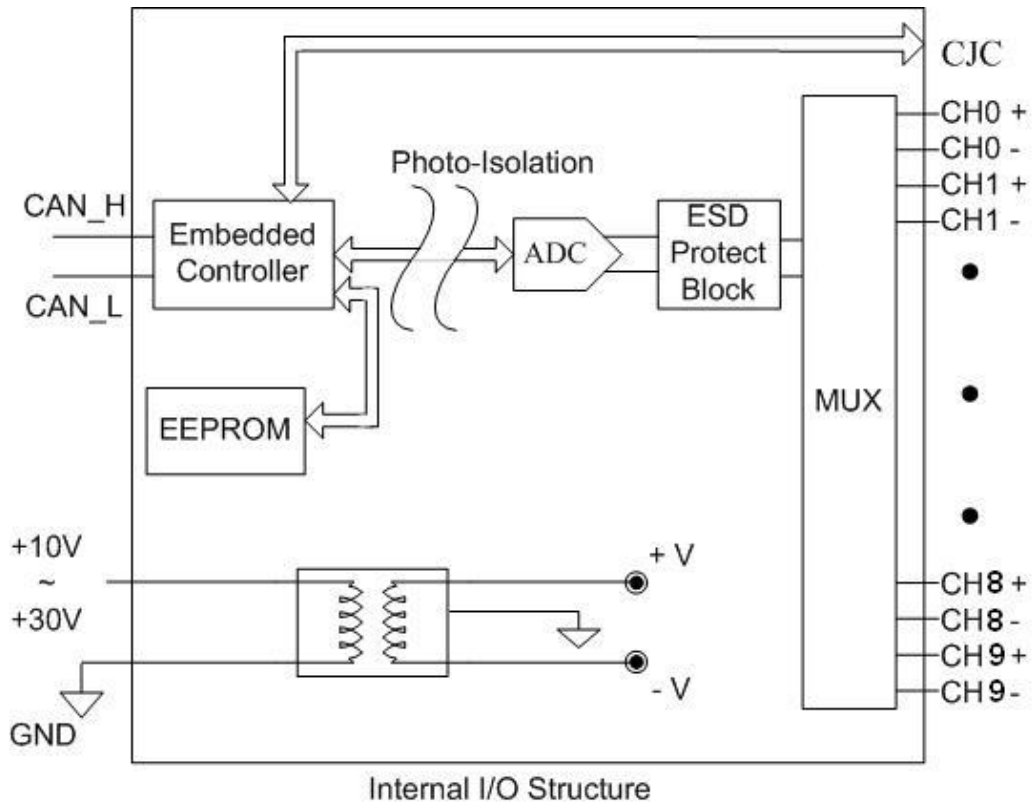
# CAN-2019C Pin Assignments



Pin Assignment Name	Terminal No.	Pin Assignment Name
+5V	01	DGND
CJC	02	CH0+
CH0-	03	CH1+
CH1-	04	CH2+
CH2-	05	CH3+
CH3-	06	CH4+
CH4-	07	CH5+
CH5-	08	CH6+
CH6-	09	CH7+
CH7-	10	CH8+
CH8-	11	CH9+
CH9-	12	AGND
AGND	13	
		Shield
		F.G.

25-pin Female D-Sub Connector

## CAN-2019C Internal I/O Structure

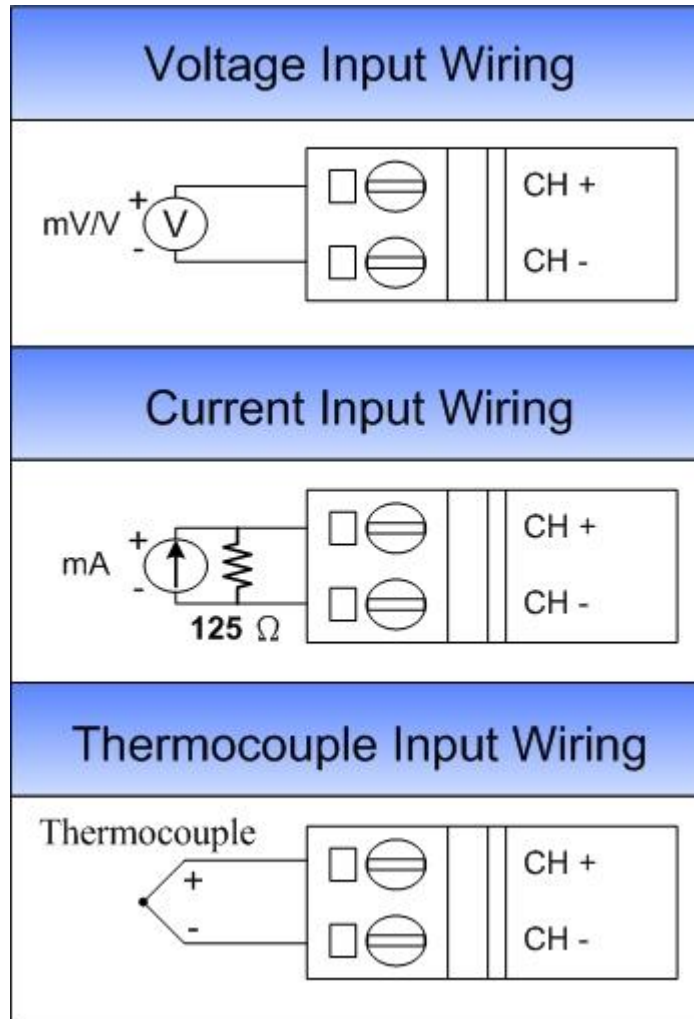


**Baud rate rotary switch**

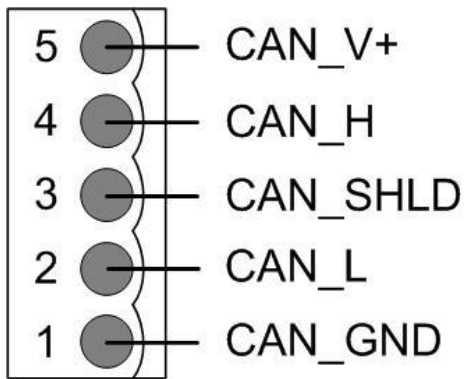
Rotary Switch Value	Baud rate (k BPS)
0	10
1	20
2	50
3	125
4	250
5	500
6	800
7	1000

**Baud rate and rotary switch**

# CAN-2019C Wiring Connection Type



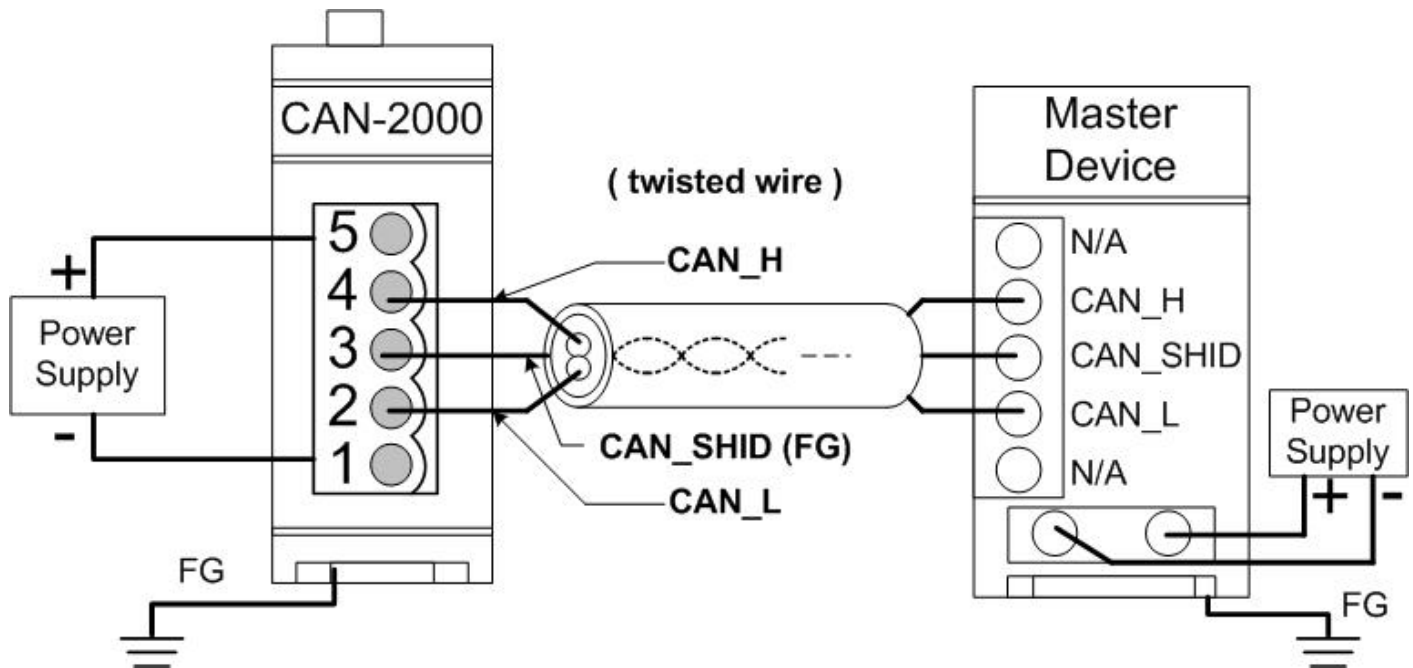
## CAN-2019C CAN Bus Wire Connection



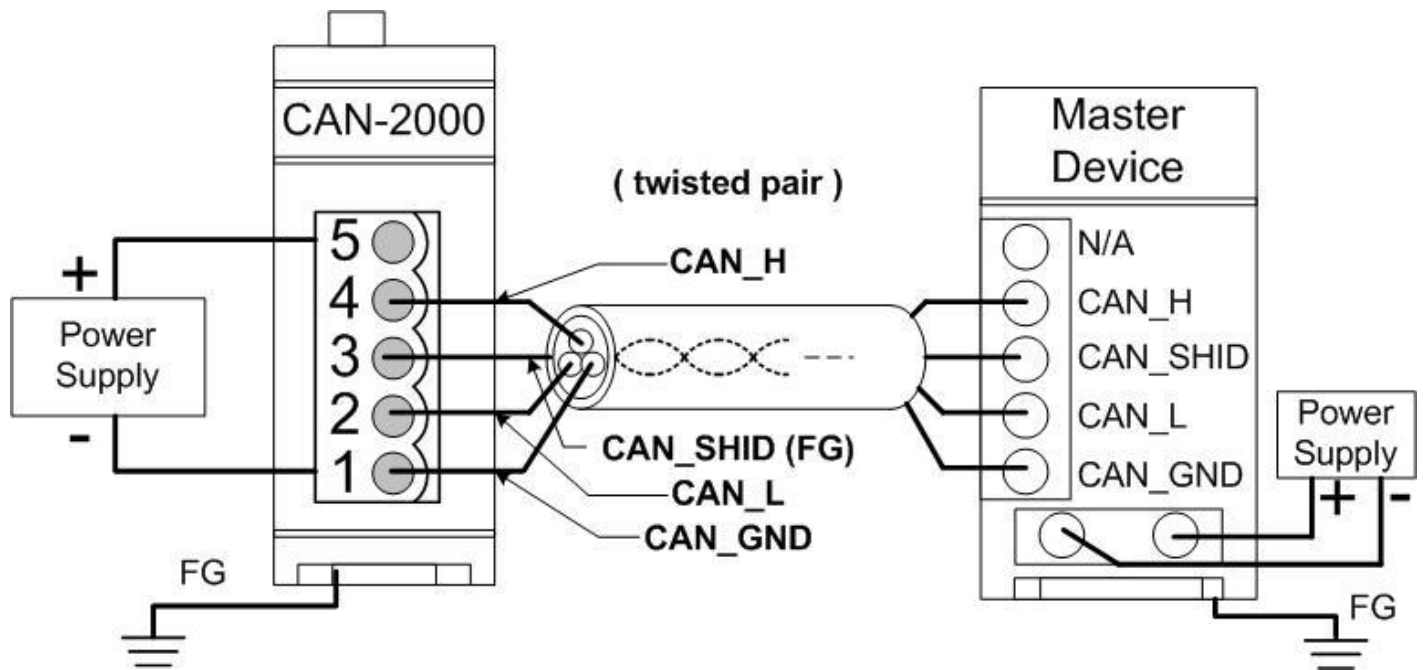
Pin	Signal	Description
5	CAN_V+	Power positive
4	CAN_H	Signal high of CAN Bus line
3	CAN_SHLD	Cable Shield ( <b>FG</b> )
2	CAN_L	Signal low of CAN Bus line
1	CAN_GND	CAN ground

\* CAN\_SHID (FG) is Optional.

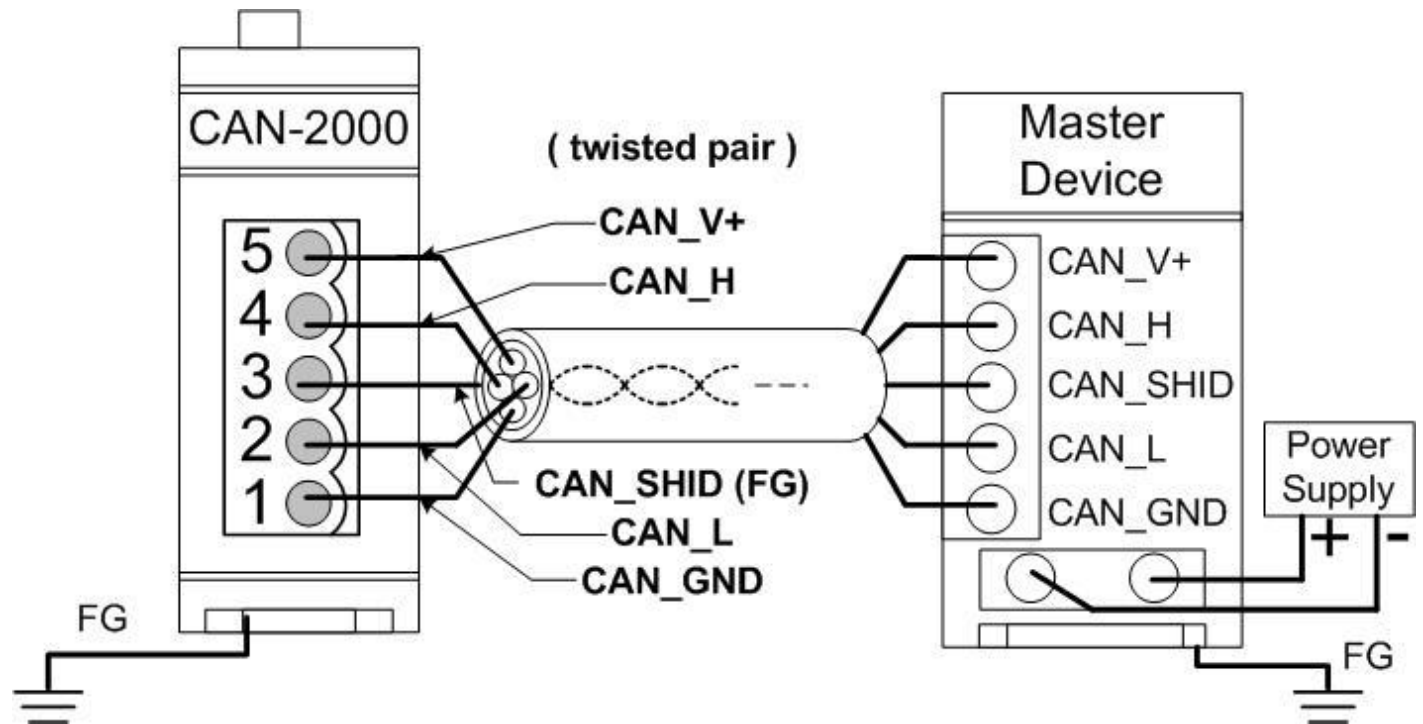
### 2-Wire Connection



### 3-Wire Connection

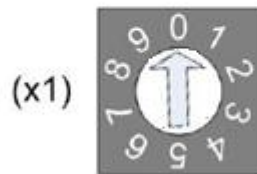
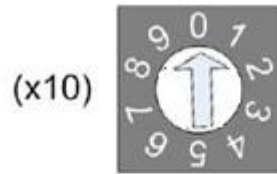


### 4-Wire Connection (The CAN-2000 is powered by the master device)



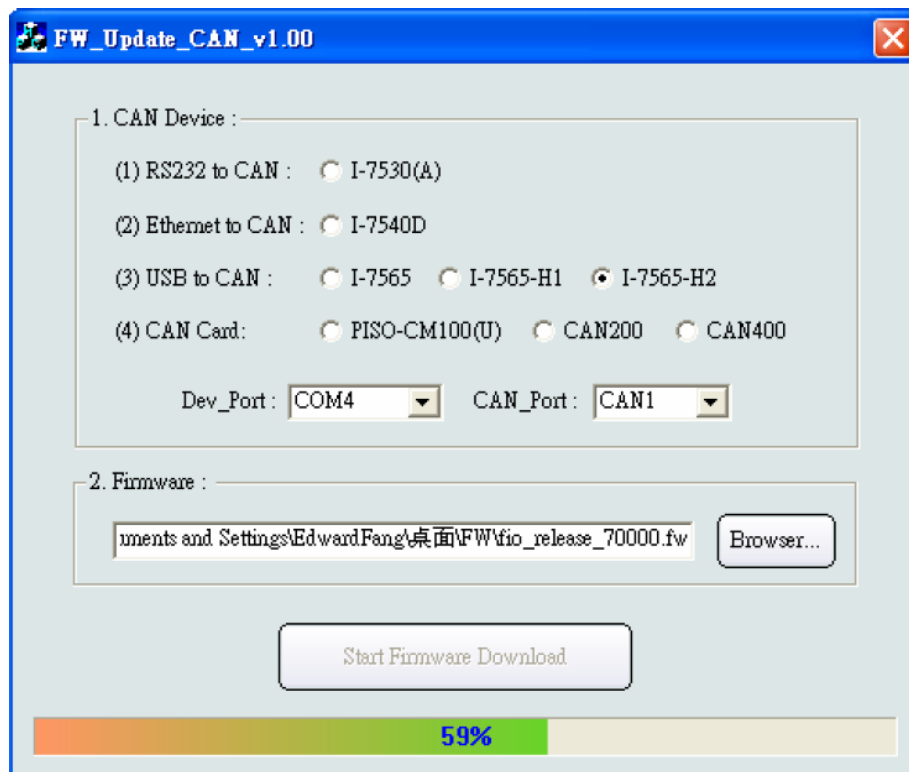
## CAN-2019C Firmware Update

**Step 1 – Set Module to “Bootloader” mode (set Node ID to 00, Baud rate to F). 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\_2019c\_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-2019C firmware Download:

[ftp://ftp.icpdas.com/pub/cd/fieldbus\\_cd/canopen/slave/can-2000c/CAN-2019C/](ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/canopen/slave/can-2000c/CAN-2019C/)

FW\_Update\_CAN Utility Download:

[ftp://ftp.icpdas.com/pub/cd/fieldbus\\_cd/canopen/slave/can-2000c/tools/](ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/canopen/slave/can-2000c/tools/)