What's in the box?

In addition to this guide, the package includes the following items:

I-7565M-FD	Screw Driver (1C016)	USB cable (CA-USB15)

Related Information

- **I-7565M-FD User Manual**

  http://ftp.icpdas.com/pub/cd/fieldbus_cd/can/converter/i-7565m-fd/manual

- **I-7565M-FD Website**

  http://www.icpdas.com/root/product/solutions/industrial_communication/fieldbus/can_bus/converter/I-7565M-FD.html

- **ICP DAS Website**

  http://www.icpdas.com/

1 --
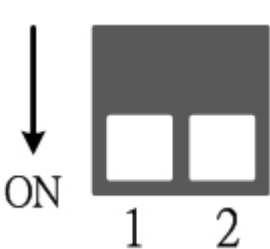# Hardware Installation

Before using I-7565M-FD device, some things must be done.

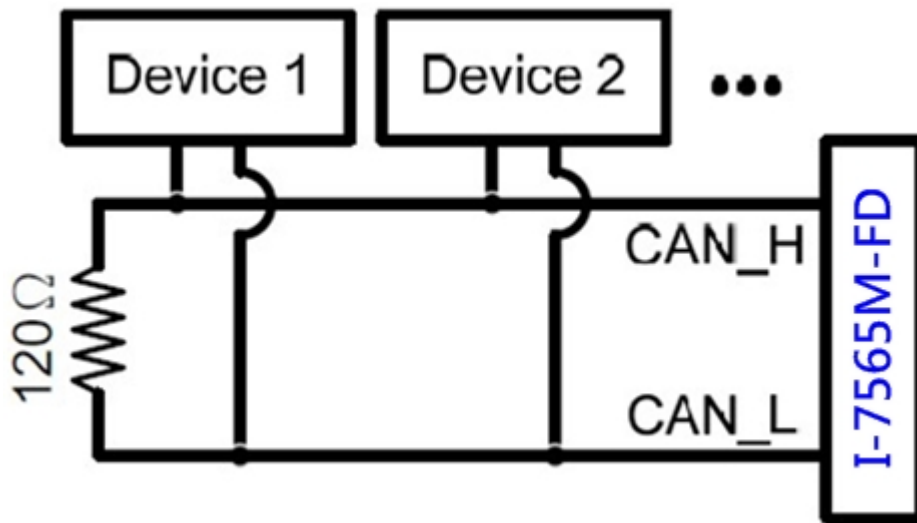**Step 1: Prepare one I-7565M-FD device**

Step 2: Determine if the terminal resistor is needed or not

Check the application structure, and determine if the terminal resistor is needed or not. You can find it at the position as follows.

Dip switch for CAN1/CAN2 terminal resistor
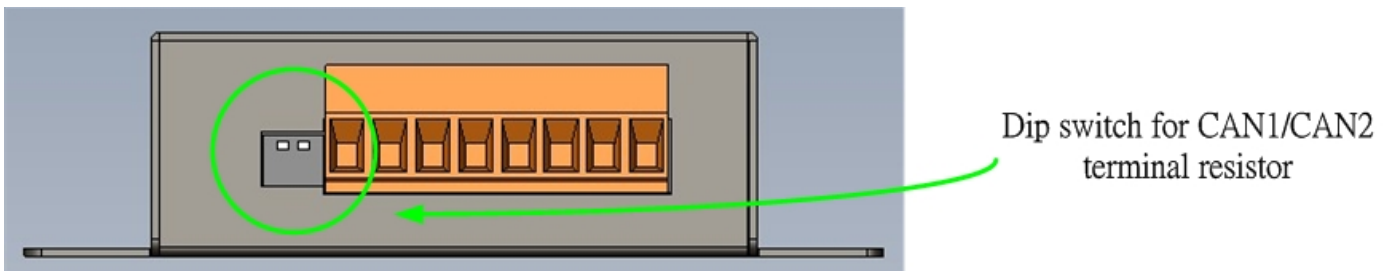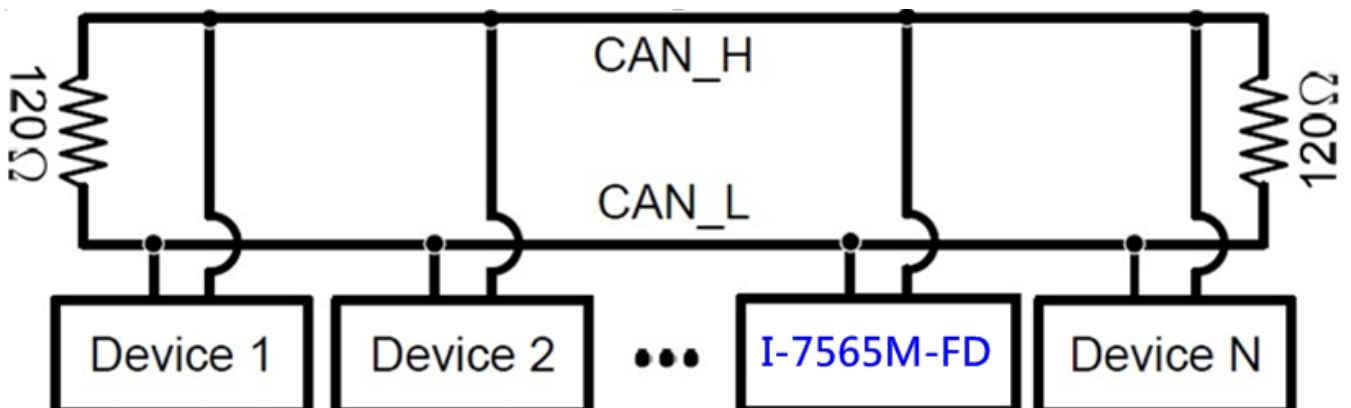
	Pin No.	Description
ON ↓ [1] [2]	1	ON: Active CAN1 terminal resistor (default) OFF: Inactive CAN1 terminal resistor
	2	ON: Active CAN2 terminal resistor (default) OFF: Inactive CAN2 terminal resistor

Generally, if your application is as follows, we recommend you to enable the terminal resistor.

```
       ┌──────────┐  ┌──────────┐
       │ Device 1 │  │ Device 2 │   •••
       └──────────┘  └──────────┘
                                       ┌──────────┐
  120Ω ─WWW─                   CAN_H   │ I-7565M-FD│
                                       │          │
                              CAN_L    │          │
                                       └──────────┘
```

If your application is like the structure as follows, the terminal resistor is not needed.

```
  120Ω ─WWW─          CAN_H                 ─WWW─ 120Ω

                      CAN_L

  ┌──────────┐ ┌──────────┐        ┌────────────┐ ┌──────────┐
  │ Device 1 │ │ Device 2 │  •••   │ I-7565M-FD │ │ Device N │
  └──────────┘ └──────────┘        └────────────┘ └──────────┘
```

Step 4: Connect the CAN port and USB port of the I-7565M-FD.

The pin assignment and wire connection are as follows. When finished, run your application with the I-7565M-FD.

USB Type B
(CA-USB15 cable)

I-7565M-FD
(Top View)
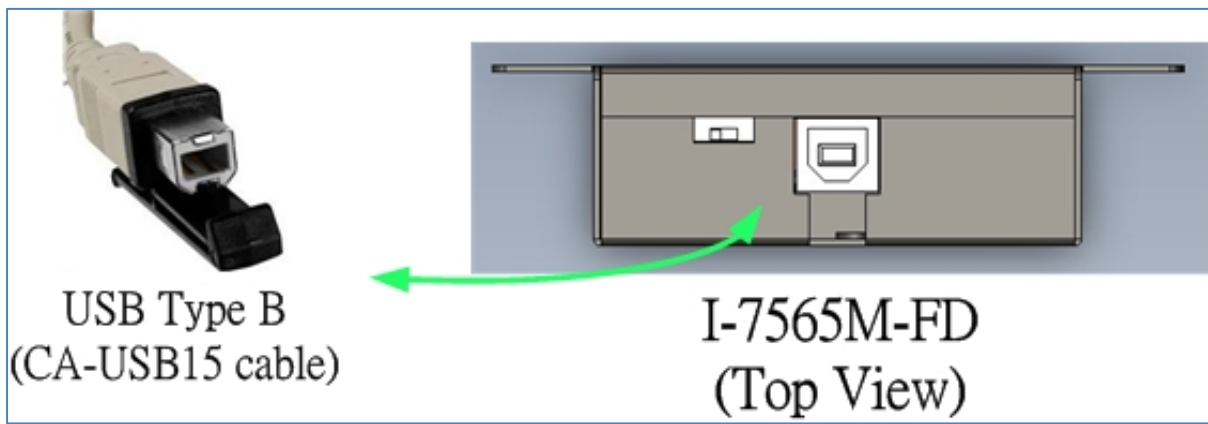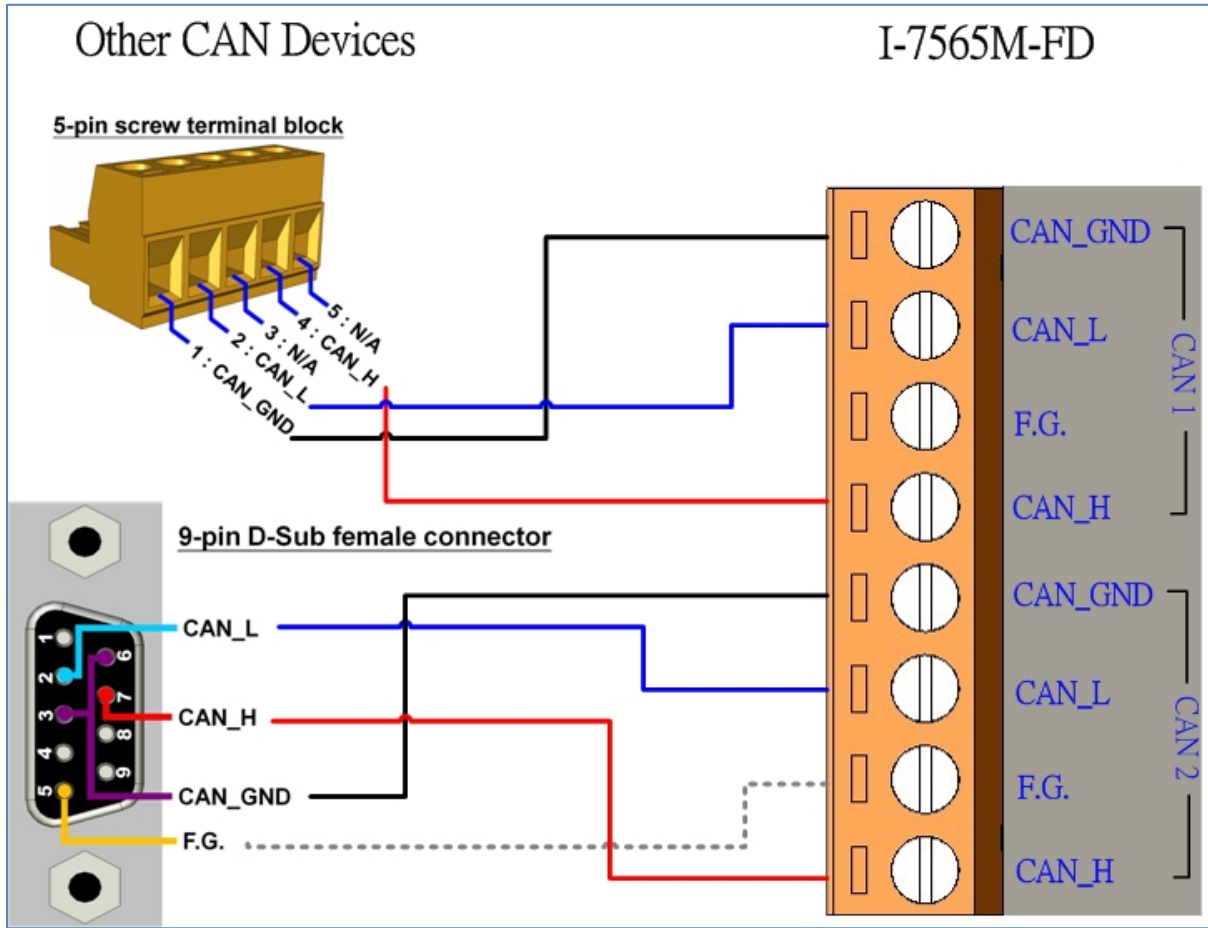
2 --
Utility tool

I-7565-FD Utility is provided by ICP DAS to transmit / receive CAN/CAN FD messages for CAN Bus communication testing easily and quickly.
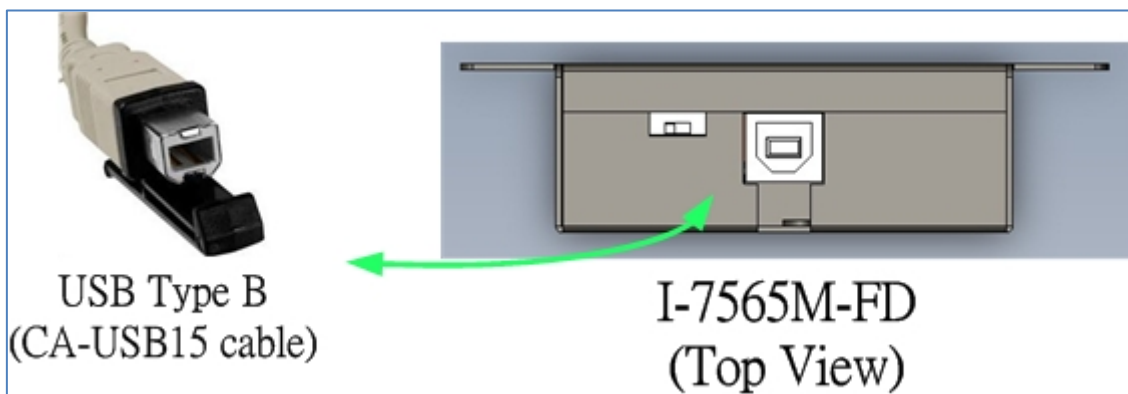
Step 1: Install the I-7565-FD Utility

The software is located at:
http://ftp.icpdas.com/pub/cd/fieldbus_cd/can/converter/i-7565m-fd/software/utility

Step 2: Setting up the I-7565M-FD module

1. Connect the PC available USB port with the USB port of the I-7565M-FD device. Users can find the communication cable (CA-USB15) in the product box.

USB Type B
(CA-USB15 cable)

I-7565M-FD
(Top View)

2. Execute the I-7565-FD Utility tool.

Step 3: Connect to I-7565M-FD module

When executing the Utility, the tool will try to scan all the necessary I-7565M-FD modules and list all scanned module information on "Module Name" location of the Utility "Connect" frame. User can re-connect to re-scan the newer inserted I-7565M-FD module.
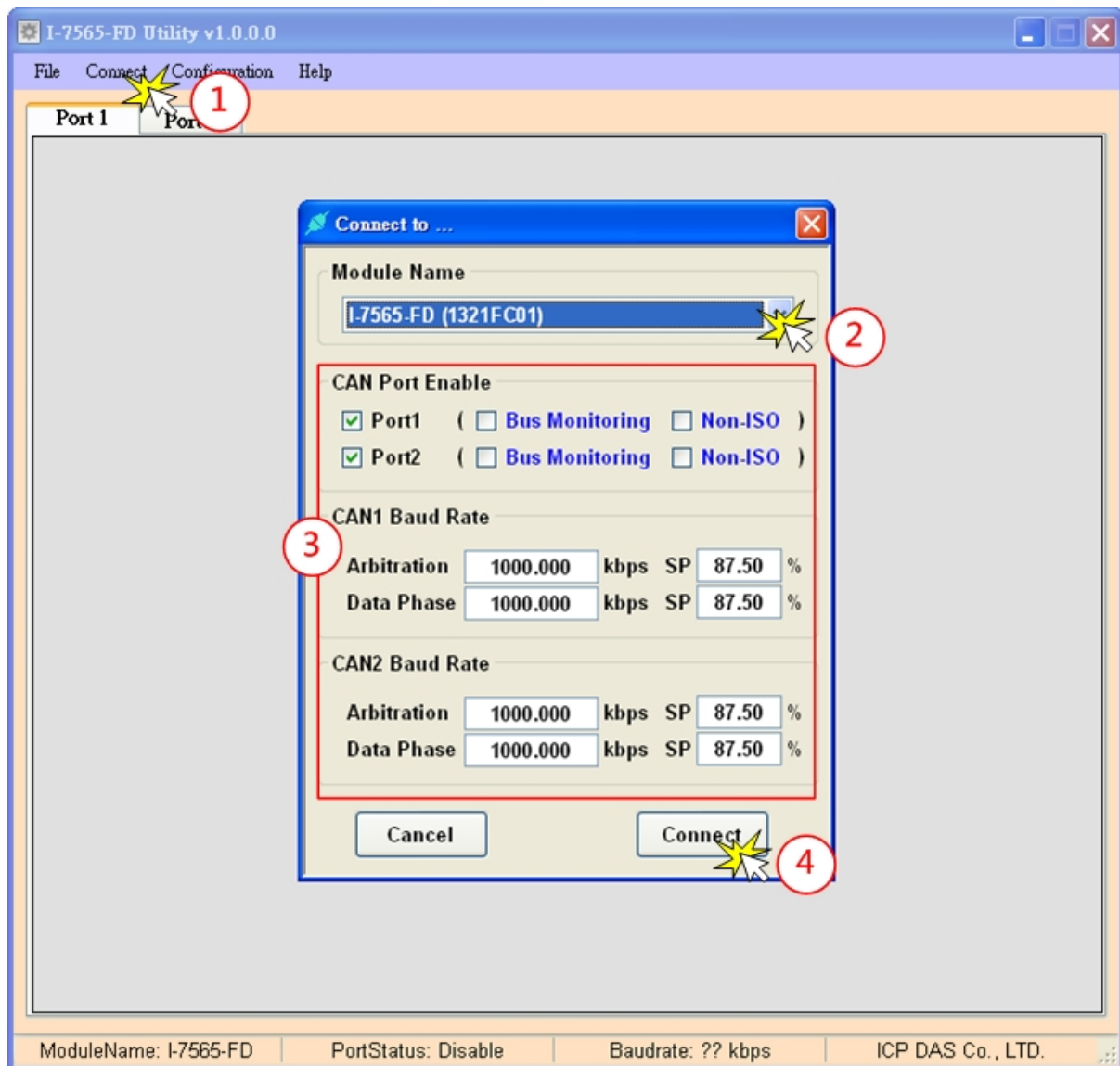
Before connect to the module, user can set the CAN port operation mode and CAN/CAN FD baudrate parameter of the module. Please refer to the following steps to configure the I-7565M-FD device.

1: Click the "Connect to …" item to open the "Connect" frame of Utility.

2: Select the necessary I-7565M-FD module.

3: On the "CAN Port Enable" and "CAN1/CAN2 Baud Rate" location, user can set the CAN Bus, and other prarameters. The detail functions of these parameters are list below.

[CAN Port Enable]
"Port Enable":   Enable/Disable the CAN1/CAN2 port.

"Bus Monitoring" : Set the CAN port into bus monitoring mode. When setting the CAN port into bus monitoring mode, the CAN port will just receive CAN/CAN FD messages, no CAN Ack command be sent to the CAN Bus.

"Non-ISO":   Non-ISO operation. If this parameter is checked, the module uses the CAN FD frame format as specified by the Bosch CAN FD Specification V1.0. Otherwise, CAN FD frame format will follow according to ISO11898-1.

[CAN Baudrate]
"Arbitration": CAN/CAN FD arbitration phase bit rate. Valid range: 10 kbps ~ 1000 kbps.

"Data Phase": CAN FD data phase bit rate. Valid range: 100 kbps ~ 3000 kbps

"SP":   CAN/CAN FD arbitration/data phase bit rate sample point.
Suggested range: 75.00 ~ 87.50 %

4: Press the "Connect" buttom to start to use the above setting to send/receice CAN messages.

Step 4: Send, receive CAN/CAN FD messages

By using the I-7565-FD Utiltiy tool, user can send and receive CAN/CAN FD messages via the I-7565M-FD devices.

Send CAN/CAN FD messages and check received CAN/CAN FD messages