

tM-7565

Quick Start

Oct 2018, Version 1.0.0

Congratulations!

The tM-7565 module is a USB/CAN converter solution. It can help users to implement the CAN network communication via USB. Due to its small size, it is easily to fit narrower environment.

What's In the Box!

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



tM-7565



Fieldbus CD



Quick Start



Screw Driver



CA-USB18

Technical Support

- **tM-7565 User Manual**

CD:\fieldbus_cd\can\pac\converter\tm-7565>manual\

http://ftp.icpdas.com/pub/cd/fieldbus_cd/can/converter/tM-7565/manual/

- **tM-7565 Website**

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

- **tM-7565 Utility**

http://ftp.icpdas.com/pub/cd/fieldbus_cd/can/virtual_can/

- **ICP DAS Website**

<http://www.icpdas.com/>

Hardware Introduction and Installation

The tM-7565 module includes the two interfaces, USB and CAN bus. The tM-7565 module has 2 LED indicators, such the Run LED and the Err LED. They are used to response module status immediately at all time.



| Pin | Description |
|-----|-------------------------|
| 1 | CAN Low(CAN_L) |
| 2 | CAN High(CAN_H) |
| 3 | CAN Ground(CAN_GND) |
| 4 | CAN Low(CAN_L, bypass) |
| 5 | CAN High(CAN_H, bypass) |
| 6 | N/A |
| 7 | Frame Ground(F.G.) |



Table: LED Indicator

| LED Indicator | Condition | Status |
|---------------|----------------------|---------------------------------------|
| Run | Configuration Mode | Flashing Once Per Secord |
| | Run Mode | Turn on when no data needs to be sent |
| | | Flash once when sending a CAN message |
| Err | FIFO overflow | Always turned on |
| | CAN Bus Off | |
| | CAN Error Passive | |
| | Some errors occurred | Flashing |

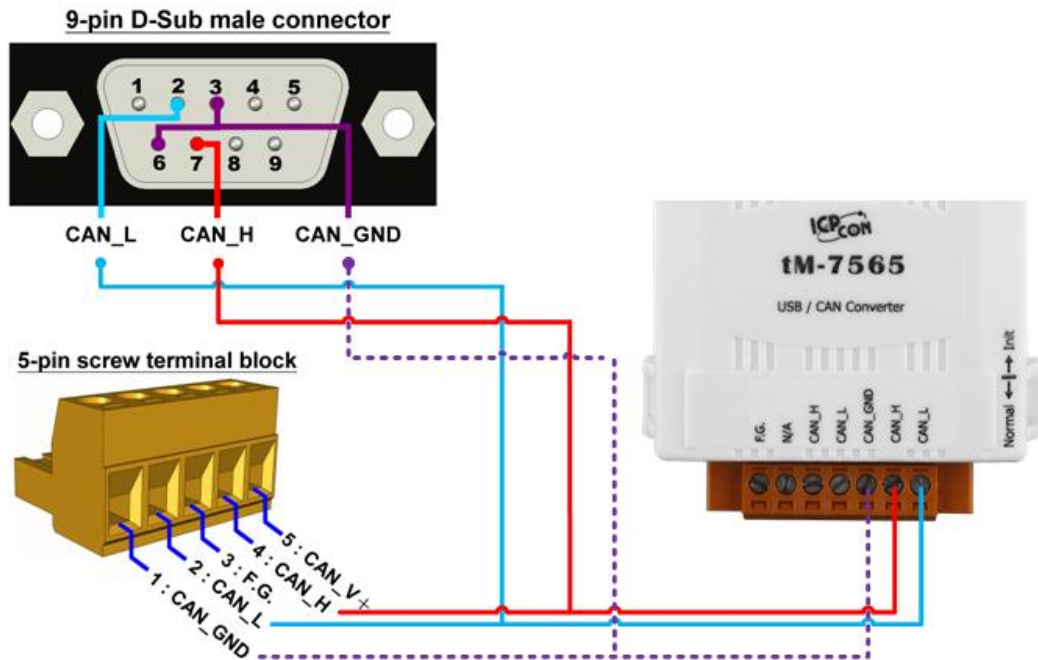
Configuration/Run Mode

There is a dip-switch on the right hand side of tM-7565. After switching and rebooting, the tM-7565 module will enter into Normal mode or Init mode.

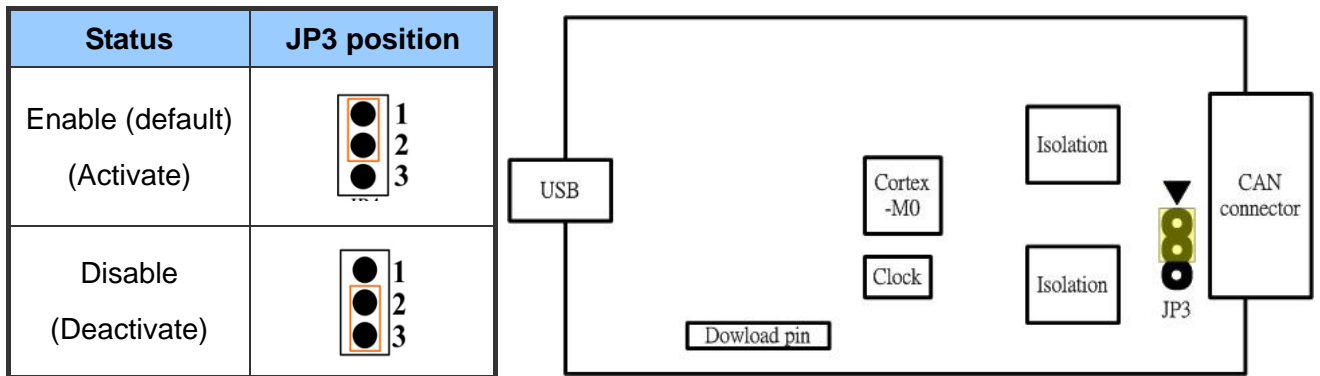


| Mode | Dip-Switch Position |
|--------|---|
| Normal | Normal  Init |
| Init | Normal  Init |

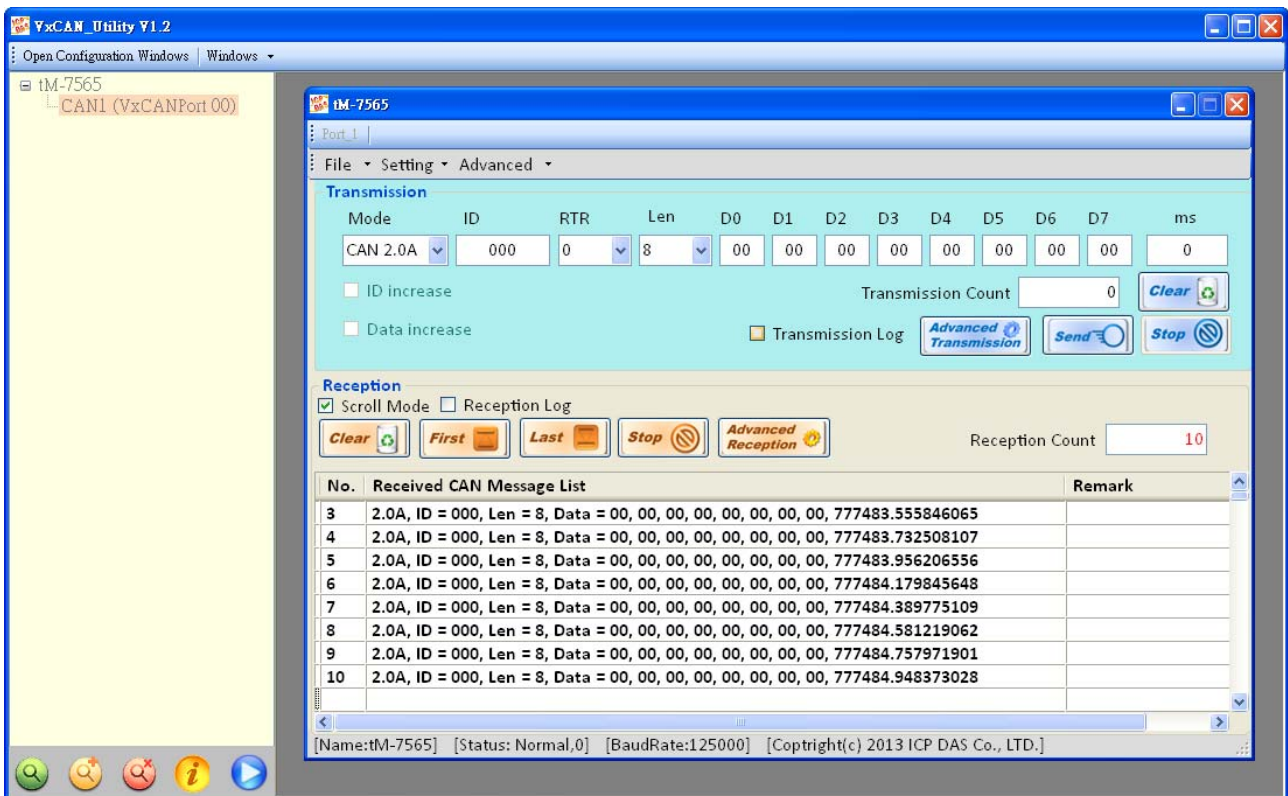
The tM-7565 module wire connection



Terminal Resistor



Software Utility Introduction



The tM-7565 module uses VxCAN Utility to configure module and test. The VxCAN Utility is based on the Virtual CAN technology which is developed by the ICP DAS and used to integrate the CAN interfaces of the different CAN converters from the ICP DAS. All of the CAN interfaces found by the PC will be sequentially mapping to the virtual CAN ports by the Virtual CAN driver. Users just use the virtual CAN ports to develop their application, and don't need to know what kind of CAN converter they use.


Configure the tM-7565 module via VxCAN Utility

Step 1: The tM-7565 module is set on the Init Mode


Before powering on the CAN converters, users must set them to the Init mode. Users need to switch the Init/Normal DIP-Switch to Init position



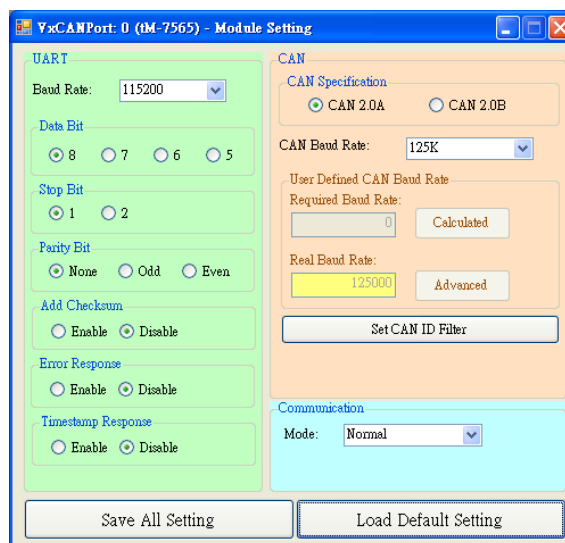
Step 2: Connect the available COM port of the PC to the tM-7565 module, and execute the VxCAN Utility.

Step 3: Click the button  to search the tM-7565 module connected to the PC.

Step 4: After searching done, the tM-7565 module will be list in the left window of VxCAN Utility.

 tM-7565 -Init

Step 5: Click the tM-7565-Init in the list, the module configuration dialog is popped up.



The configuration is divided to three areas with different color. They are UART, Communication, and CAN configuration area. Each area can set different parameters of the tM-7565 module.



After finishing the configuration, users can click the button “Save All Setting” to save the configuration in to the EEPROM of the CAN converter. If users would like to recover the parameters to the factory default, click “Load Default Setting” button to recover all of the configuration parameters to be default value. Afterwards, users can use the button “Save All Settings” to save the default parameters in to the EEPROM of the CAN converter.

The default values of the parameters of the CAN converter are shown below.

USB:

| | |
|--------------------|----------|
| RS-232 Baud rate | = 115200 |
| Data Bit | = 8 |
| Stop Bit | = 1 |
| Parity | = None |
| Add Checksum | = No |
| Error Response | = No |
| TimeStamp Response | = No |

CAN:

| | |
|-------------------|--------|
| CAN Specification | = 2.0A |
| CAN bus Baud rate | = 125K |
| Acceptance Code | = 000 |
| Acceptance Mask | = 000 |

Communication:

Mode: Normal


Test the tM-7565 module via VxCAN Utility

Step 1: The tM-7565 module on Normal Mode

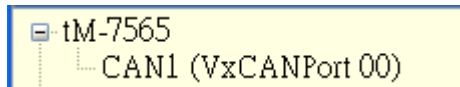
Set the Init/Normal DIP switch of the CAN converter to normal mode. When the CAN module runs on the normal mode, the run LED indicator will be turned on. If the CAN converter sends or receives the CAN messages, the run LED will be flashing once per message.



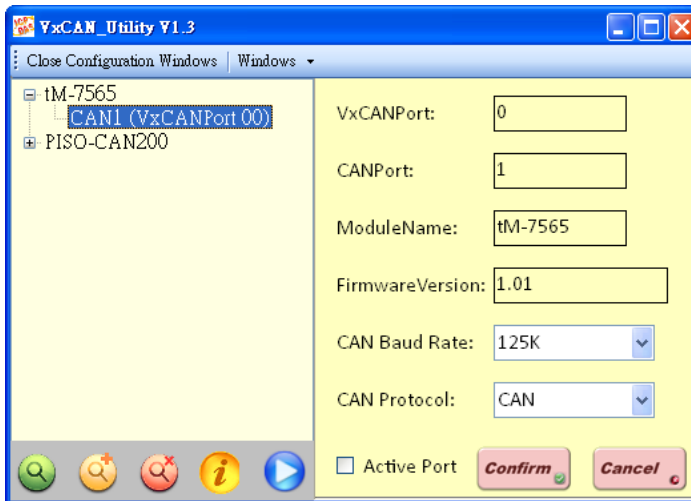
Step 2: Connect the COM port of PC to the CAN converter, and execute the VxCAN Utility

Step 3: Click the search button  to search all CAN converters connected to the PC.

Step 4: After searching done, the tM-7565 will be list in the left window of VxCAN Utility.

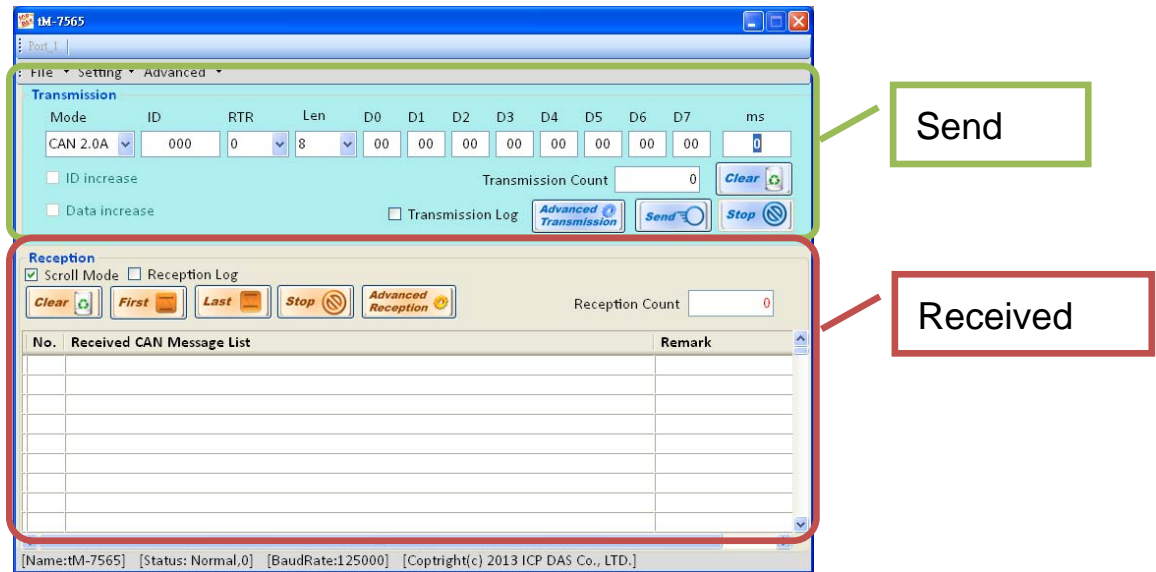


Step 5: Click the CAN port of the tM-7565 to set the CAN parameters of the tM-7565.



Check the “Active Port” and Click “Confirm” button to enable the CAN port of the CAN converter. The parameters set here are not stored in the EEPROM. If users would like to configure the other parameters expect the CAN parameters, please use Configuration interface of the VxCAN Utility to do that.

Step 6: Click “Start” button  to open test interface.



The test interface is divided to two areas. One is for sending CAN messages, and the other is for reception. If users want to send CAN message, fill the data into the corresponding field, and click “Send” button. If the CAN converter gets any CAN messages, they will be shown in received area automatically. About the details for the VxCAN Utility operation please refer to the users’ manual of the VxCAN Utility in the following web site.

http://ftp.icpdas.com/pub/cd/fieldbus_cd/can/virtual_can/vxcan_utility/