I-7567
USB to HART Converter

Quick Start User Guide

1. Introduction

This quick start manual will guide users to implement the I-7567 module into their applications in a quick and easy way. For the more detailed information, please refer to the user's manual in the Fieldbus_CD of ICP DAS ("CD:\hart\convert\i-7567\manual\i-7567_usermanual.pdf") for detail.

We will use an I-7567 module (as a HART master), one HART slave and one PC as the example shown in Figure 1-1 and demonstrate how to use the I-7567 utility for I-module configuration and HART communication test.
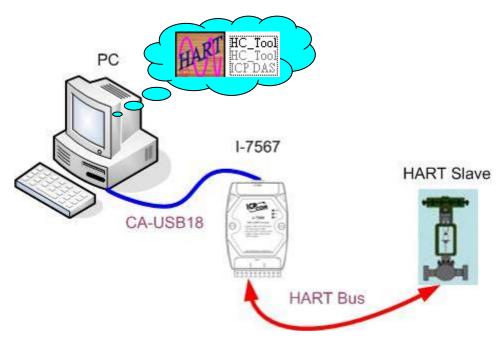

Figure 1-1: Architecture of Example

2. Hardware Installation

Users may need to make a hardware setting before the application. The detailed illustration is as below :

[Step1: USB connection & Install I-7567 Driver]

Connect the USB port of the I-7567 to PC. Then users can refer to the "Driver Installation" chapter in the user's manual to complete the I-7567 driver installation.
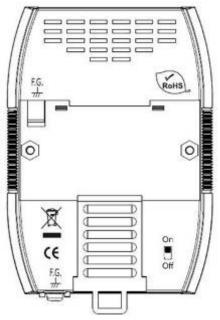
[Step2: Check the LED Indication I-7567]

If the driver is installed successfully, the PWR LED will be always on. It means I-7567 is working in the "Firmware Operation" mode.
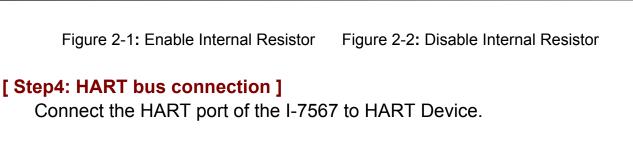
LED Name	Power off	No Driver	FW Update	FW Operation	USB Port Data Received	HART Port Data Received
PWR LED	off	flash	off	on	on	on
Tx LED	off	flash	off	off	flash	off
Rx LED	off	flash	off	off	off	flash

[Step3: Enable or Disable the 250Ω resistor]

If the DIP switch is set to be "On", it will enable the 250Ω resistor like Figure 2-1. If the DIP switch is set to be "Off", then it will disable the 250Ω resistor like Figure 2-2.

Figure 2-1**:** Enable Internal Resistor   Figure 2-2**:** Disable Internal Resistor

[Step4: HART bus connection]

Connect the HART port of the I-7567 to HART Device.

3. Using I-7567 Utility

Step1: Connect USB port of I-7567 to PC, it will turn on the power of I-7567. If the PWR LED is always on, then it means the I-7567 converter is working in the "Firmware Operation" mode.

Step2: Run the "I-7567 Utility", **HC_Tool**, and click the "Settings" item like Figure 3-1 to configure the serial connection and HART command parameters. About the virtual com port number, please refer to the "Device Manager" like Figure 3-2.
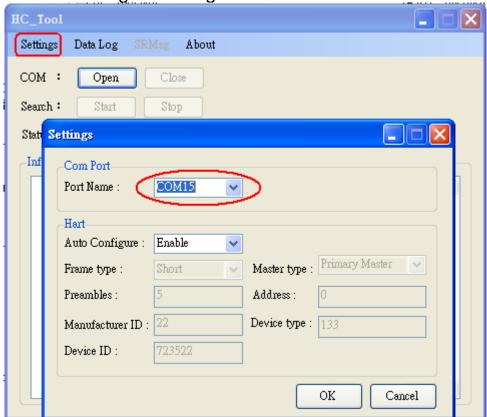

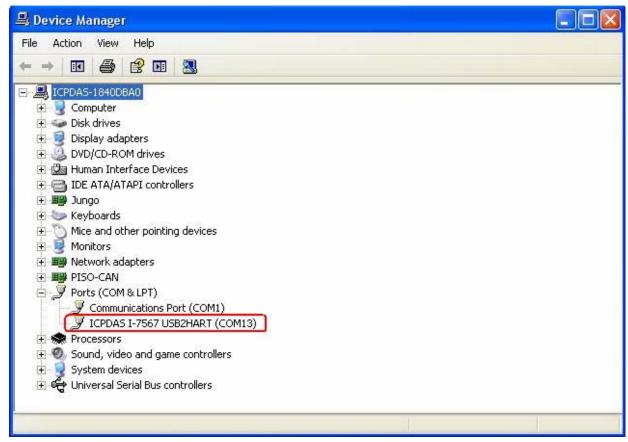Figure 3-1**:** "Settings" function of HC_Tool

Figure 3-2**:** The Virtual COM Port Number

Step3: Set the "Port Name" and "Auto Configure" parameters like Figure 3-3.

Figure 3-3**:** Set "Com Port" and "HART" Parameters

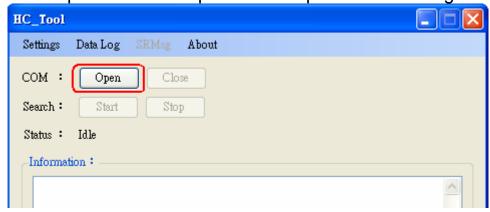**Step4:** Click "Open" button to open the com port of PC like Figure 3-4.

Figure 3-4**:** Click the "Open" button

Step5: Click "Start" button to search all HART devices and the result will be shown in the "Information" field like Figure 3-5.
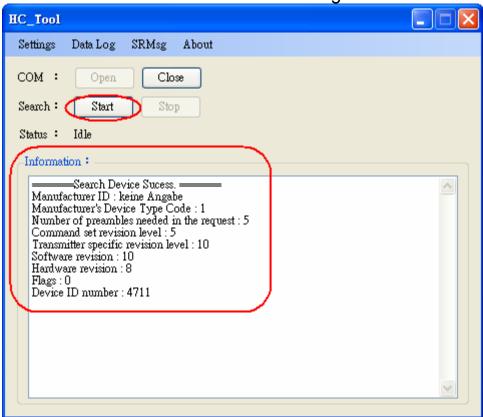

Figure 3-5**:** HART device Information