

I-7547

Ethernet to HART Converter

Quick Start User Guide

1. Introduction

This quick start manual will guide users to implement the I-7547 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-7547>manual\i-7547_usermanual.pdf") for detail.

We will use an I-7547 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 utility (HC_Tool) for module configuration and HART communication test.

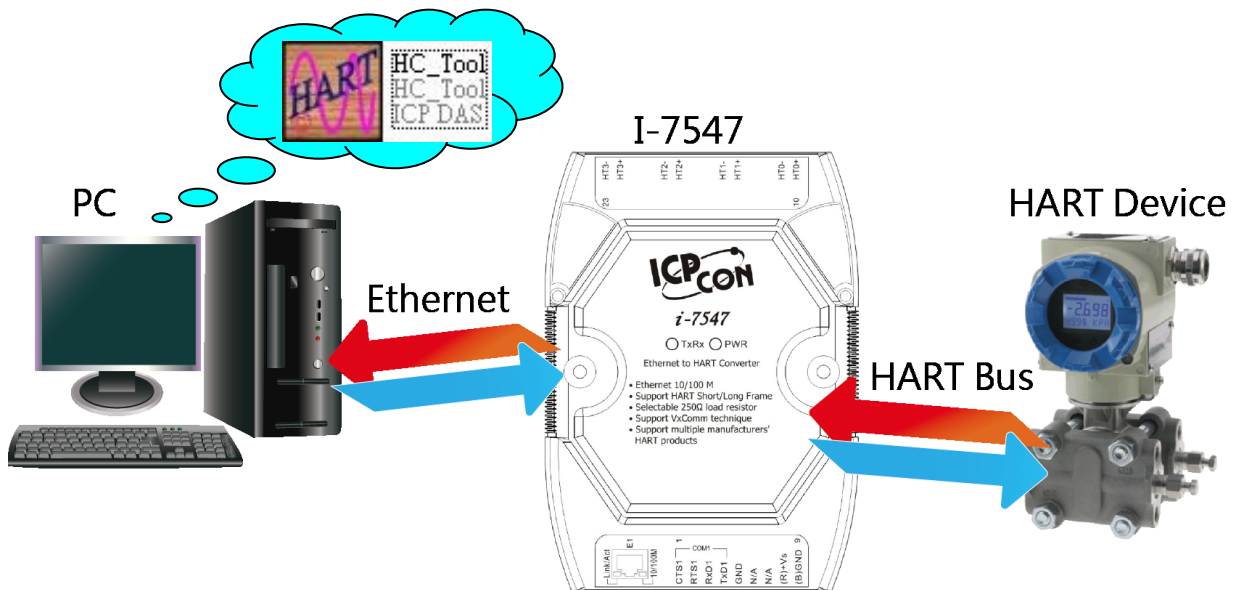


Figure 1-1: Architecture of Example

2. Hardware Installation

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

[Step1: Connect Ethernet port & Set FW Operation Mode]

Connect the Ethernet port of the I-7547 to PC and set the dip-switch on the back of I-7547 to the “Normal” position. Then turn on the I-7547 module power.

[Step2: Check the LED Indication I-7547]

Check the PWR LED of I-7547 if it is on immediately when power on. If yes, it means I-7547 is working in the “Firmware Operation” mode.

Mode LED Name	Power off	FW Update	FW Operation	Ethernet Data Received	HART Port Data Received
PWR LED	Off	On after 5 sec when reboot	On Immediately when reboot	On	On
TxRx LED	Off	Off	Off	Flash	Flash

[Step3: Enable or Disable the Terminator Resistor]

There are four jumpers (JP3~JP6) at top of the I-7547 module, shown in Figure 2-1. The jumper can provide HART network with 250 Ω (1/4 W) load resistor. When the pin 1&2 of these jumpers are connected, the resistor will connect to HART network. When the pin 2&3 of these jumpers are connected, it will disconnect the resistor from HART network. By default, the pin1&2 of JP3~JP6 are connected.

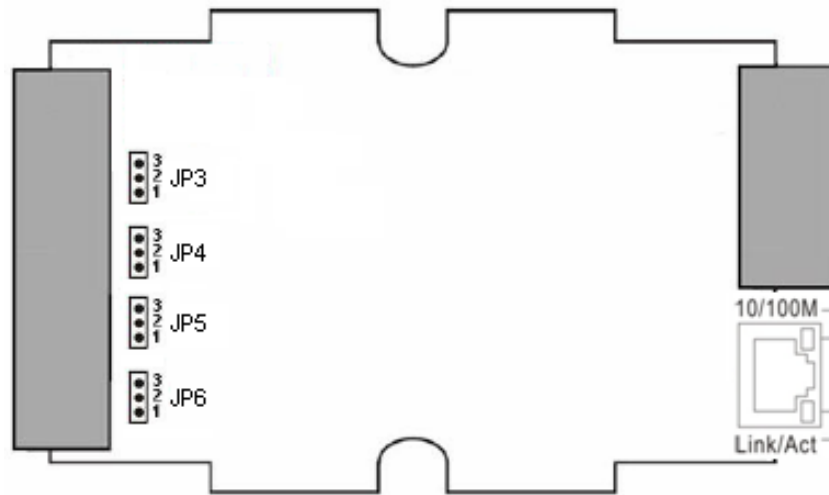


Figure 2-1: Terminator Resistor

[Step4: HART bus connection]

Connect the HART port 0 of the I-7547 to HART Device.

3. Using I-7547 Utility

Step1: Turn on the power of I-7547, if the PWR LED of the I-7547 is on immediately, then it means the I-7547 converter is working in the “Firmware Operation” mode.

Step2: Run the “I-7547 Utility”, **HC_Tool**, and click the “Settings” item like Figure 3-1 to configure the serial connection and HART command parameters.

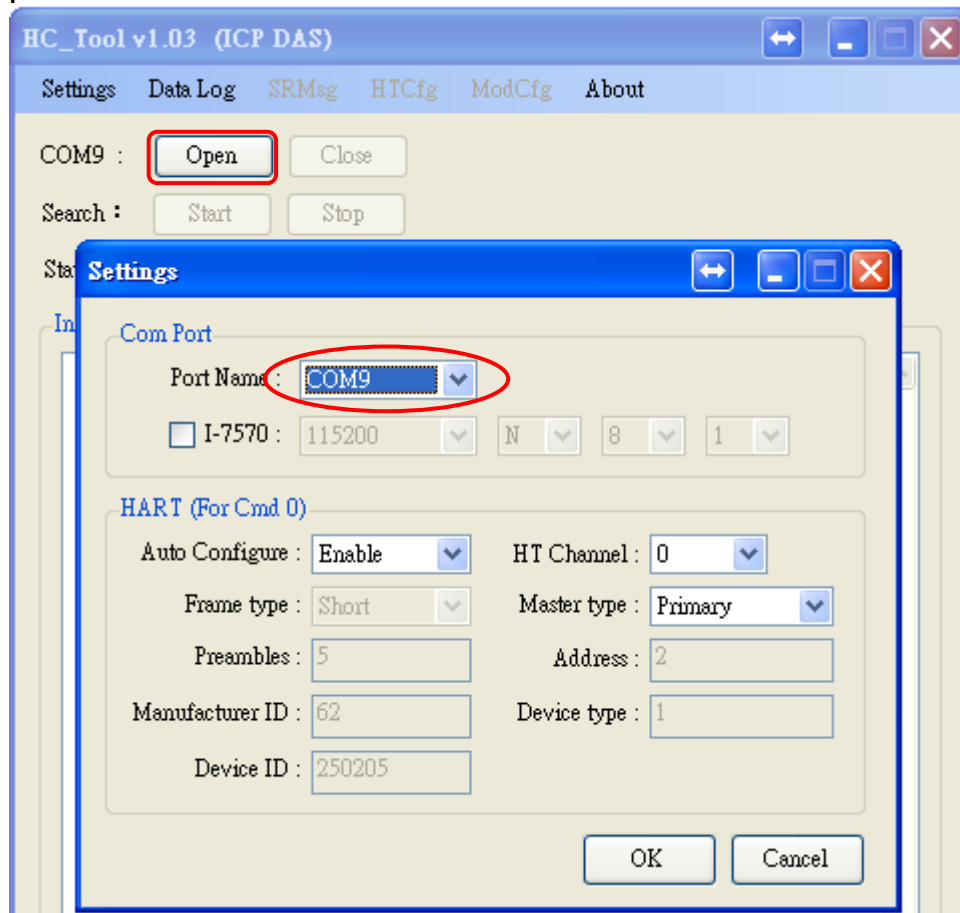


Figure 3-1: “Settings” function of HC_Tool

Step3: Set the “Port Name”, “Auto Configure” and “HT Channel” parameters like Figure 3-2.

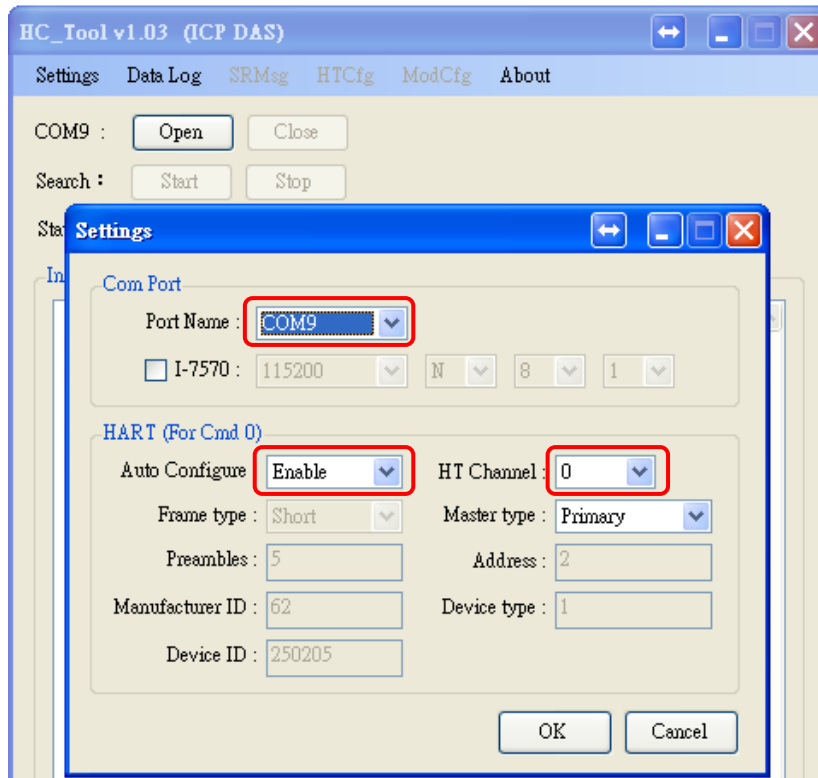


Figure 3-2: Set Com Port and HART Command Parameter

Step4: Click “Open” button to open the com port of PC like Figure 3-3.

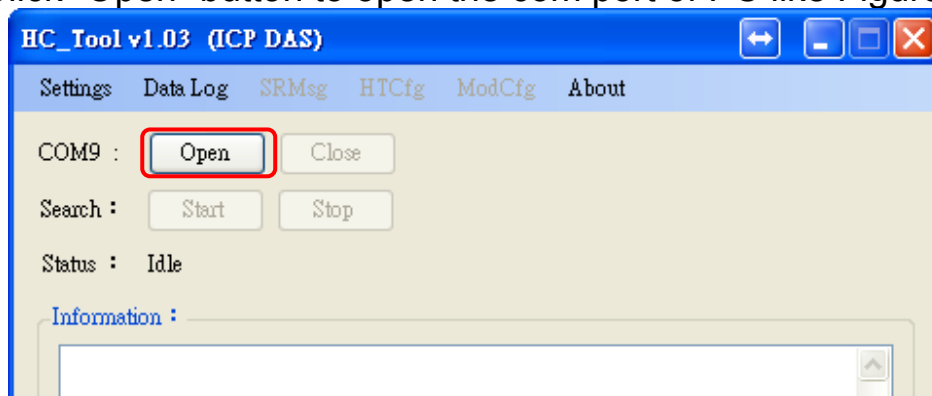


Figure 3-3: Click the “Open” button

Step5: Click “Start” button to search all HART devices and the result will be shown in the ”Information” field like Figure 3-4.

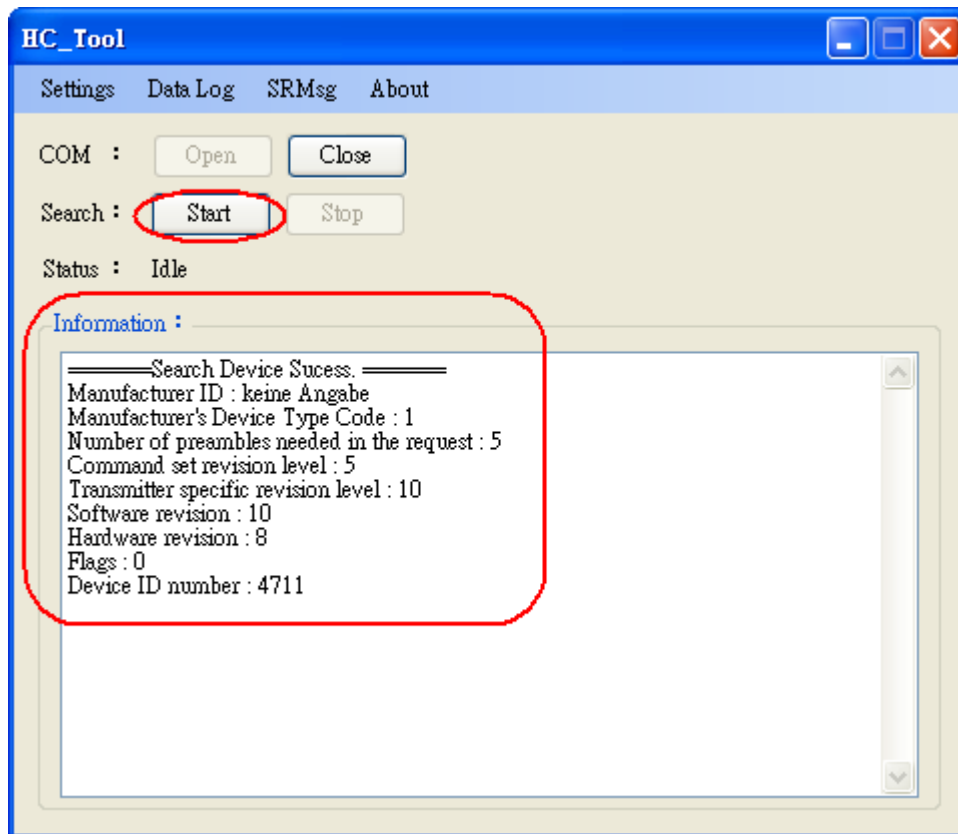


Figure 3-4: HART device Information