



Quick Start Guide for DGW-521

Mar. 2014, Version 1.00

Congratulations!

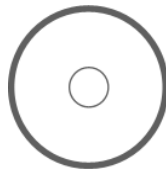
Congratulations on purchasing the DGW-521 the most popular automation solution for remote monitoring and control applications. This Quick Start Guide will provide information needed to get started with the DGW-521. Please also consult the User Manual for detailed information on the setup and use of the DGW-521.

What's in the shipping box?

In addition to this guide, the shipping box includes the following items:



DGW-521



Software Utility CD



Quick Start

Technical Support

- ICP DAS Website

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

1 Understanding the Hardware Specifications

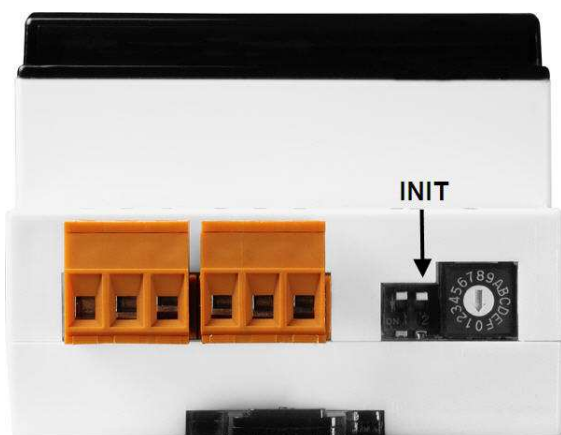
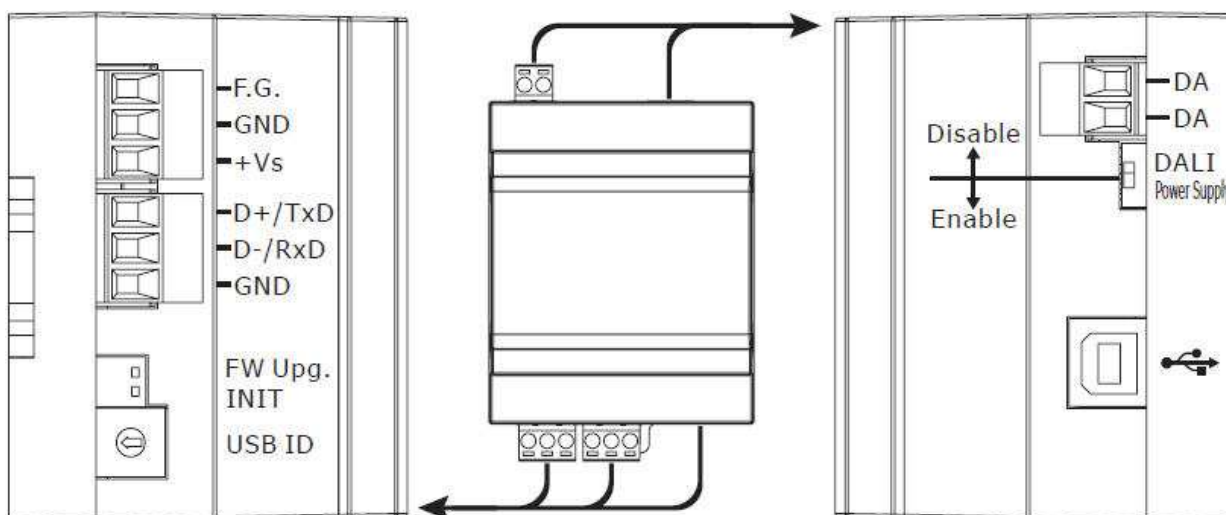
Before installing the hardware, you should have a basic understanding of hardware specification and the wiring diagrams.

Specifications :

Interface		
DALI	Connector	2-pin Terminal Block
	Baud Rate (bps)	1200
	Isolation	1500 V _{DC}
	Build-in DALI power	DC 16 V _{DC} ± 5%, max. current 250 mA (Enabled/Disabled via a switch)
UART	COM Port	RS-485/RS-232
	Connector	3-pin Terminal Block (D+, D-, GND/TxD, RxD, GND), Jumper Selectable
	Transmission Distance (m)	Depends on Baud Rate
	Baud Rate (bps)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
	Protocol	DCON, Modbus RTU
USB	Connector	USB Type B
	Transmission Speed	12M bps
	Specification	USB 1.1 and USB 2.0 standard compatible
	OS Support	Windows XP (32/64 bit), Windows 7 (32/64 bit)
	Protocol	DCON and Modbus RTU via Virtual COM port
LED Indicators		
System LED Indicators	PWR/RUN/ERR LED	
EMS Protection		
ESD (IEC 61000-4-2)	±4 kV contact for Each Terminal, ±8 kV Air for Random Point	
EFT (IEC 61000-4-4)	±4 kV for Power Line	
Surge (IEC 61000-4-5)	±2 kV for Power Line	
Power		
Power Supply	Unregulated +10 V _{DC} ~ +30 V _{DC}	
Connector	3-pin Terminal Block	
Protection	Power Reverse polarity protection, Overvoltage	

	Brown-out Protection
Consumption	6 W.
Mechanical	
Casing	Plastic
Flammability	Fire-Retardant Materials (UL94-V0 Level)
Dimensions (L x W x H)	107 mm x 72 mm x 57 mm
Installation	DIN-Rail Mounting
Environment	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-30 ~°C +80 °C
Humidity	10 %~ 95% RH, Non-condensing

Pin Assignment :



2 Booting the DGW-521 in Init Mode

Make sure the INIT switch placed in the "ON" position.

3 Connecting to the PC and the Power Supply

The DGW-521 series is equipped with an RS-485 port for connection to a 232/USB converter to PC

Connect to the PC using an RS-485 Converter



PC

RS-232



Power Supply



I-7520

Connect to PC using a USB Converter



PC

USB



Power Supply



RS-485

DGW-521



Power Supply

RS-485



DGW-521

I-7561

DGW-521 Quick Start Guide

4 Installing the DCON Utility

The DCON Utility is an easy-to-use tool designed to enable simple configuration of I/O modules that use the DCON protocol.

Step 1: Locate the DCON Utility



The DCON Utility can be obtained from the companion CD or from the ICPDAS FTP site: CD:\Usb_tM\NAPDOS\DGW-521\
DCON_Utli...

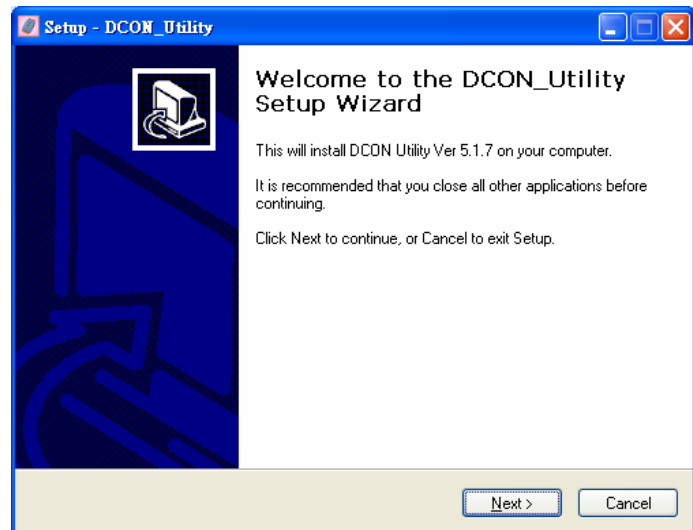
ftp://ftp.icpdas.com.tw/pub/cd/usb_tm/napdos/

Step 2: Follow the prompts to complete the installation



dcon_utility...

After the installation has been completed, there will be a new shortcut to the DCON Utility on the desktop.



5 Using the DCON Utility to Initialize the DGW-521 Module

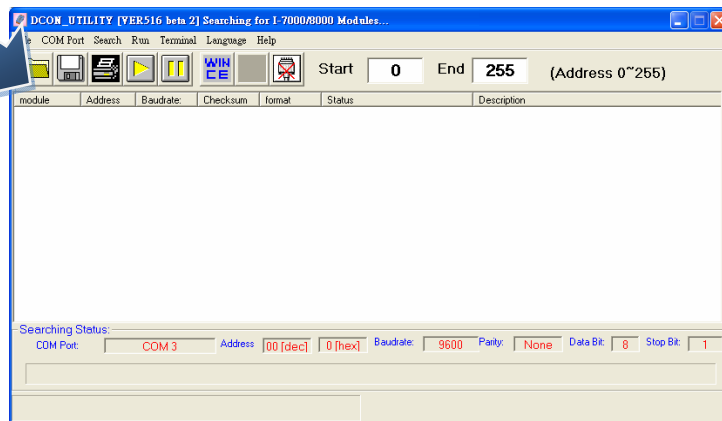
The DGW-521 based on the DCON protocol, meaning that you can use the DCON Utility to easily initialize it.

Step 1: Run the DCON Utility



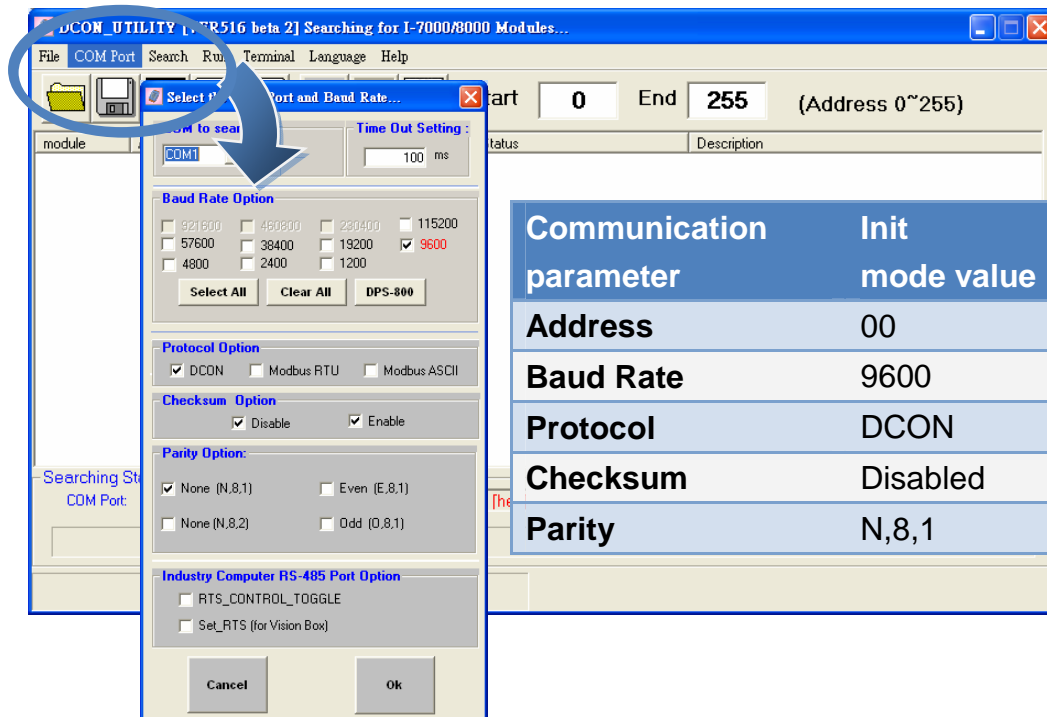
dcon_utility...

Double-click the DCON Utility shortcut on your desktop.



Step 2: Use the COM1 port to communicate with the DGW-521

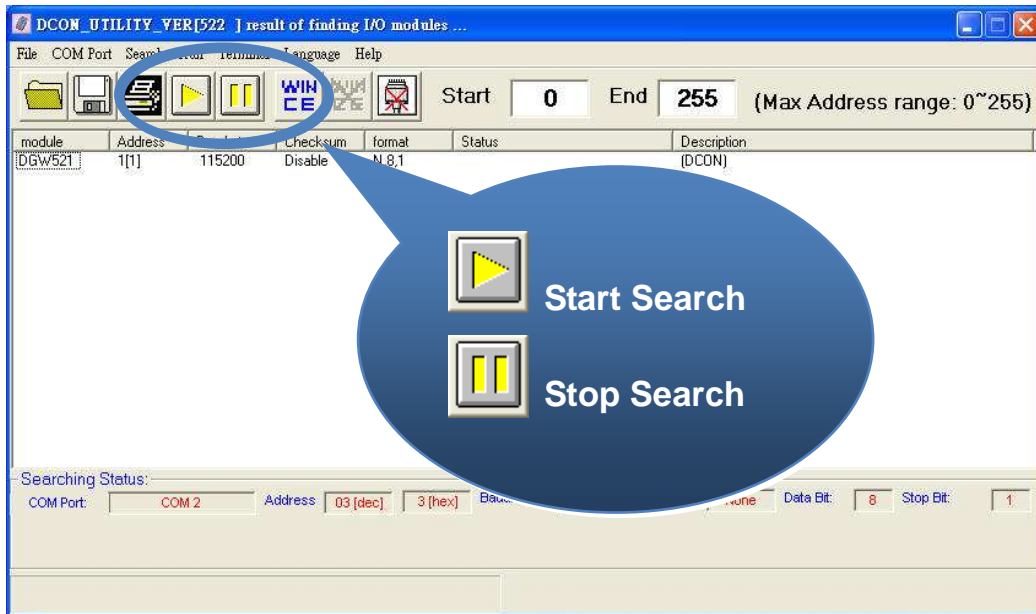
Click the “COM Port” option from the menu and a dialog box will be displayed that will allow you to set the communication parameters as described in the table below.



Communication parameter	Init mode value
Address	00
Baud Rate	9600
Protocol	DCON
Checksum	Disabled
Parity	N,8,1

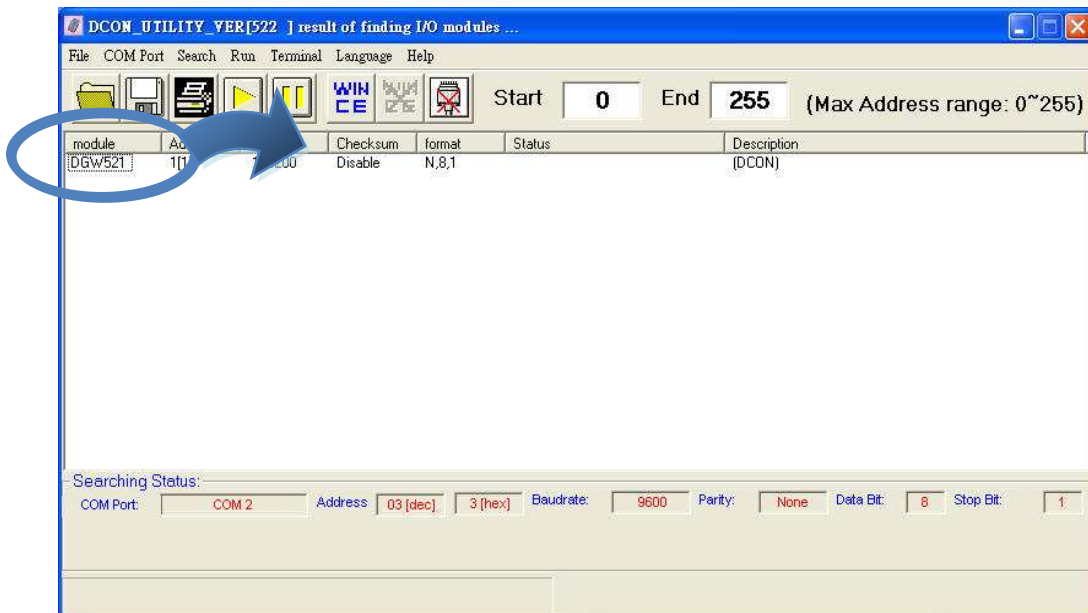
Step 3: Search for the DGW-521 module

Click “Start Search” button from the toolbox to search for the DGW-521 module. After the DGW-521 module is displayed in the list, click “Stop Search” button.



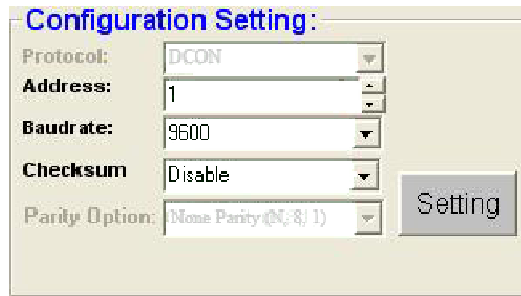
Step 4: Connect to the DGW-521

After clicking on the name of the module in the list, a dialog box will be displayed.

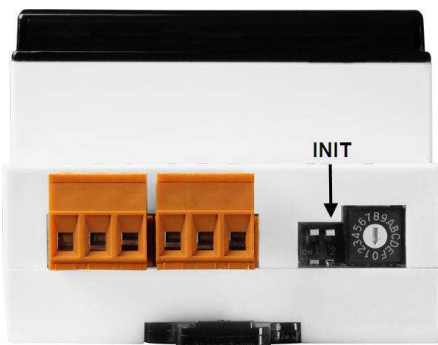


Step 5: Initialize the DGW-521 module

Set the “Address” field in the dialog box to 1 and then click “Setting” button to save the settings.



6 Rebooting the DGW-521 Module in Normal Mode



Make sure the INIT switch is placed in the "OFF" position

7 Starting the Module Operation

After rebooting the DGW-521 module, search for the module to make sure the settings have been changed. You can double click on the name of the module in the list to open the configuration dialog box.

