

Quick Start Guide for DGW-521

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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/

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}			
	Ruild in DALL power	DC 16 V_{DC} ± 5%, max. current 250 mA			
	Build-III DALI power	(Enabled/Disabled via a switch)			
	COM Port	RS-485/RS-232			
	Connector	3-pin Terminal Block (D+, D-, GND/TxD, RxD, GND),			
LIART		Jumper Selectable			
UAIN	Transmission Distance (m)	Depends on Baud Rate			
	Baud Rate (bps)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200			
	Protocol	DCON, Modbus RTU			
	Connector	USB Type B			
	Transmission Speed	12M bps			
USB	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 LE	D Indicators	PWR/RUN/ERR LED			
EMS Prote	ection				
		\pm 4 kV contact for Each Terminal, \pm 8 kV Air for Random			
ESD (IEC (61000-4-2)	Point			
EFT (IEC 6	61000-4-4)	±4 kV for Power Line			
Surge (IEC	61000-4-5)	±2 kV for Power Line			
Power					
Power Sup	ply	Unregulated +10 VDc ~ +30 VDc			
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.

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



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_Utili...

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

Step 2: Follow the prompts to complete the installation



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



Welcome to the DCON_Utility Setup Wizard

Cancel

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This will install DCON Utility Ver 5.1.7 on your computer. It is recommended that you close all other applications before continuing. Click Next to continue, or Cancel to exit Setup.

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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	DCON_UTILITY (YERS16 bets 2) Searching for 1-7000/0000 Moduler COM Port Search Run Terminal Language Help Imodule Address Address Baudrate: Checksum format Statt Description
Double-click the DCON Utility shortcut on your desktop.	Searching Status: CDM Pot COM 3 Addess 00 [dec] 0 [hex] Baudate 9600 Party: None Data Bit 8 Stop Bit 1

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.

JCON_UTILI	TY 1. "R516 beta 2] Searching for I-7000/8000	0 Modules		
File COM Port Se	earch Run Terminal Language Help			
	Select " Ort and Band Rate	art 0 End 255	(Address 0~255)	
module		tatus Description		
	■ 921800 ■ 460800 ■ 230400 ■ 115200 ■ 57600 ■ 38400 ■ 19200 ▼ 9600	Communication	Init	
	4800 2400 1200 Select All Clear All DPS-800	parameter	mode value	
	Protocol Option	Address	00	3
	CON Modbus RTU Modbus ASCI	Baud Rate	9600	
	Checksum Option Disable Enable	Protocol	DCON	
-Searching St	Parity Option: ✓ None (N,8,1) □ Even (E,8,1)	Checksum	Disabled	
	None (N,8,2)	Parity	N,8,1	2
	Industry Computer RS-485 Port Option			
	Set_RTS (for Vision Box)			
	Cancel Ok			

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.

OCON_UTILITY_VER[522] result of finding I/O mode	ales	
File COM Port Seam' remmun. Language Help		
	Start 0 End	d 255 (Max Address range: 0~255)
module Address Checksum format	Status	Description
[DGW/521] 1[1] 115200 Disable N.8,1	Start S	Search
-Searching Status: COM Port: COM 2 Address 03 (dec) 3	(hex) Bau	aune Data Bit 8 Stop Bit 1

Step 4: Connect to the DGW-521

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

					Start	0	End	255	(Max Addre	ss range: 0°	258
module [DGW521]	1[1	7 -00	Checksum Disable	format N,8,1	Status			Descriptio (DCON)	n		

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.

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Protocol:	DCON	₩.	
Address:	1		
Baudrate:	9600	Ī	
Checksum	Disable		
Parity Option	n; [None Parity (NJ/8) 1)	-	Setting

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.

DCON_UTILITY_VER[522] rest	lt of finding I/O modules	
File COM Port Search Run Terminal	Language Help	
	WIN WIN Start O End	255 (Max Address range: 0~255)
module Ador Baudrate:	Checksum format Status	Description
[UGW321] [[] 113200		
Searching Status:	uddress 03 [dec] 3 [hex] Baudrate: 9600 Parit	y: None Data Bit: 8 Stop Bit: 1