DAUDIN AH500 iO-GRIDM Modbus RTU Connection User Manual

Contents

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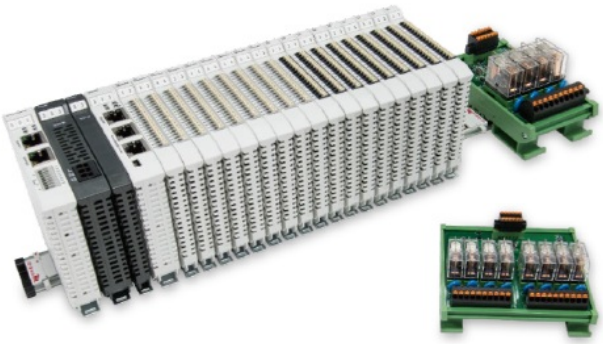


Product Information

The 2302EN V2.0.0 and AH500 Modbus RTU Connection Operating Manual provides information on the remote I/O module system configuration list and AH500 connection setup. The remote I/O module system includes a

master Modbus RTU, digital input, digital output, power supply, and interface module. The interface module is used externally to convert AH500 RS485's communication port (Modbus RTU) to an RJ45 connector. The main controller manages and configures I/O parameters. The power module and interface module are standard for remote I/Os, and users can choose the model or brand they prefer.

Product Usage Instructions

Remote I/O Module System Configuration List

To use the remote I/O module system, refer to the following list:

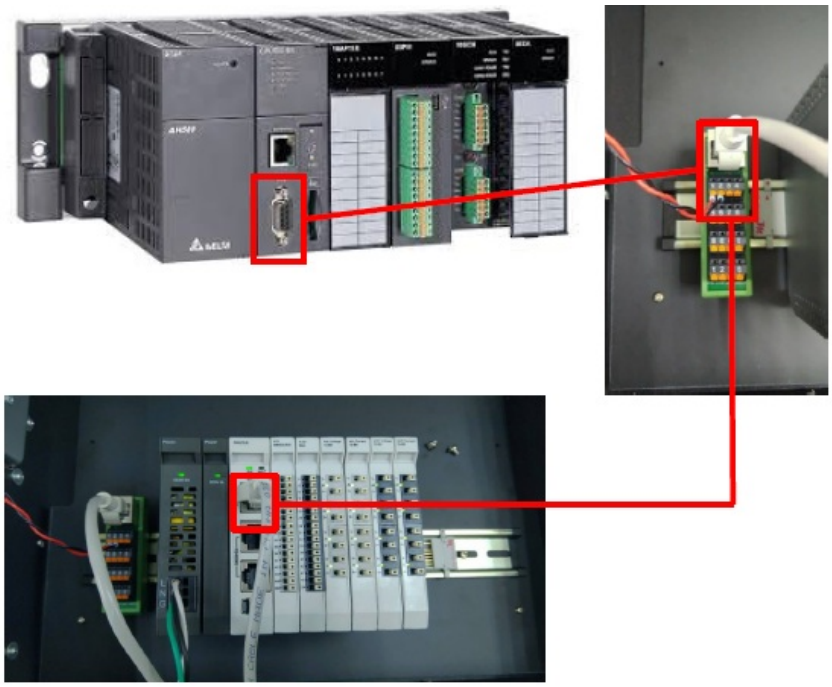
Part No.	Specification	Description
GFMS-RM01S	Master Modbus RTU, 1 Port	Main Controller
GFDI-RM01N	Digital Input 16 Channel	Digital Input
GFDO-RM01N	Digital Output 16 Channel / 0.5A	Digital Output
GFPS-0202	Power 24V / 48W	Power Supply
GFPS-0303	Power 5V / 20W	Power Supply
0170-0101	8 pin RJ45 female connector/RS-485 Interface	Interface Module

AH500 Connection Setup

Follow these instructions to connect the AH500 with iO-GRIDM using the ISPSoft program:

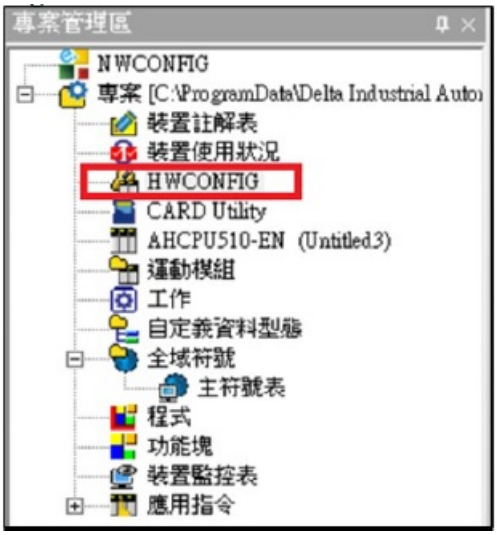
AH500 Hardware Connection

1. Locate the connection port on the top of the machine.
2. Using AHCP510-EN with COM1 (RS232 pin) for demonstration, connect COM(RS485 1/6 pin) to the interface module (1/2) to convert it into an RJ45 connector, which will be connected to the main controller.

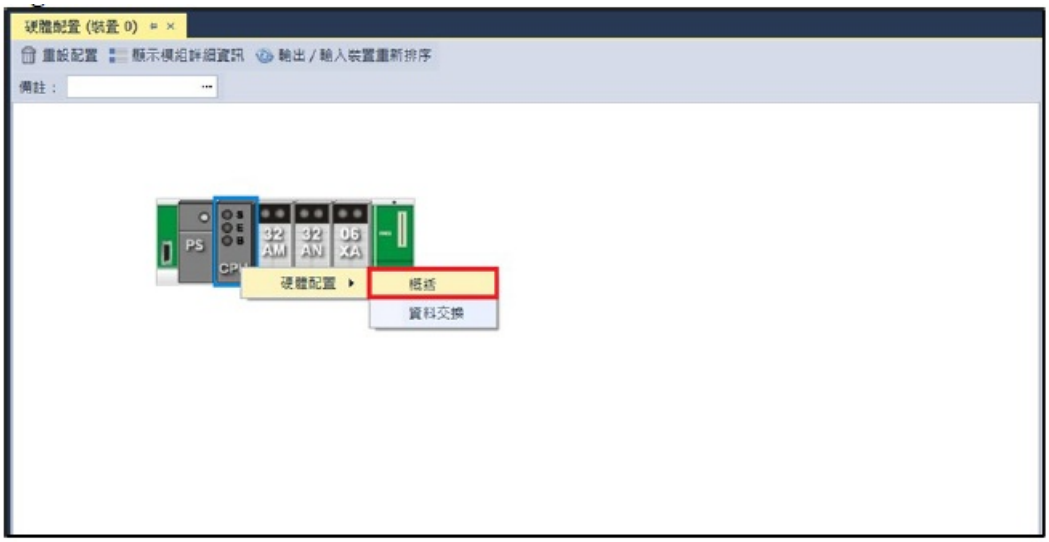


AH500 Connection Setup

1. Launch ISPSoft, create a new file and double-click HWCONFIG on the project management section on the left to enter the configuration page.
2. Right-click on the PLC icon and select Summary under Hardware Configuration.
3. Click on Communication Port and set COM1's communication settings to RS-485, 115200bps, 8 data bits, None parity, and 1 stop bit (115200, 8,N, 1). The communication parameter setting must be consistent with iO-GRID M to enable communication.
4. Use the MODRW command to set up the reading/writing of iO-GRID's I/O module Reading/Writing:
    - S1: Connected device addresses: K1~K254
    - S2: Communication function code
    - S3: The address where data will be read/written
    - S: The register where the data to be read/written is stored
    - N: Length of the data to be read/written
5. iO-GRID M's first GFDI-RM01N has the register address at 1000(HEX), and iO-GRID M's first GFDO-RM01N has the register address at 2000(HEX).
6. Refer to the programming example provided in the manual for communications and using RS485 communication to read/write the iO-GRID M module.



Right click on the PLC icon and select "Summary" under "Hardware Configuration"

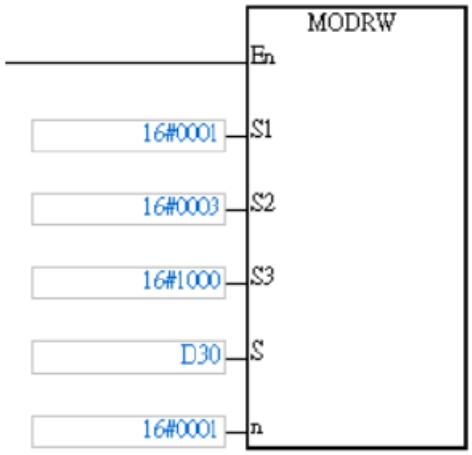


For this demonstration, click on “Communication Port” and set COM1’s communication settings to RS-485, 115200bps, 8 data bits, None parity and 1 stop bits (115200, 8,N, 1).

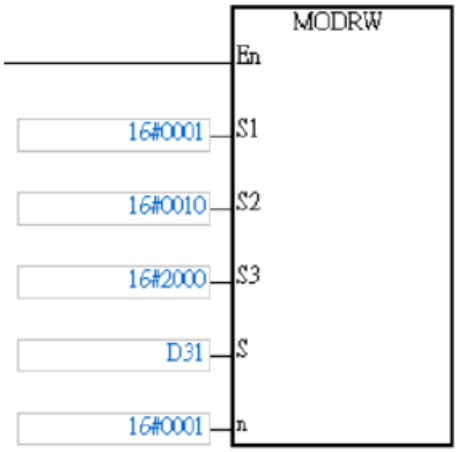
The communication parameter setting must be consistent with iO-GRID M to enable communication

Use the MODRW command to setup the reading/writing of iO-GRID ’s I/O module

Reading



Writing



S1: Connected device addresses: K1~K254

S2: Communication function code

S3: The address where data will be read/written

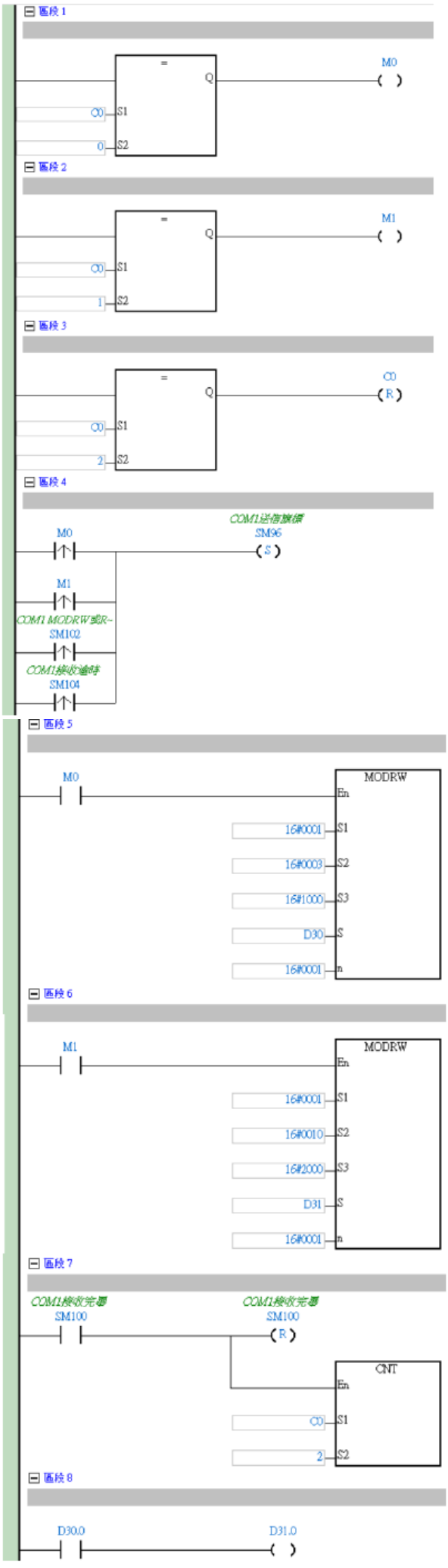
S: The register where the data to be read/written is stored

N: Length of the data to be read/written

- iO-GRID M 's first GFDI-RM01N has the register address at 1000(HEX)
- iO-GRID M 's first GFDO-RM01N has the register address at 2000(HEX)

Programming Example:

This example is for communications and using RS485 communication to read/write iO-GRID M module


区段 1
=
Q
M0
C0
S1
0
S2
区段 2
=
Q
M1
C0
S1
1
S2
区段 3
=
Q
C0
R
C0
S1
2
S2
区段 4
COM1送信旗標
M0
SM96
S
M1
COM1 MODRW或R~
SM102
COM1接收逾時
SM104
区段 5
M0
MODRW
En
16#0001
S1
16#0003
S2
16#1000
S3
D30
S
16#0001
n
区段 6
M1
MODRW
En
16#0001
S1
16#0010
S2
16#2000
S3
D31
S
16#0001
n
区段 7
COM1接收完畢
SM100
COM1接收完畢
SM100
R
CNT
En
C0
S1
2
S2
区段 8
D30.0
D31.0

Documents / Resources

	DAUDIN AH500 iO-GRIDM Modbus RTU Connection [pdf] User Manual AH500 iO-GRIDM Modbus RTU Connection, AH500, iO-GRIDM Modbus RTU Connection, Modbus RTU Connection