



# DAUDIN GFGW-RM01N Remote I/O Module System User **Manual**

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and Schneider PLC **Modbus TCP Connection Operating Manual** 





2302EN V2.0.0

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# Remote I/O Module System Configuration List

Part No.	Specification	Description
GFGW-RM01N	Modbus TCP-to-Modbus RTU/ASCII, 4 Ports	Gateway
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

### **Product Description**

- I. The interface module can convert the gateway's RS485 port into a RJ45 connection.
- II. The main controller is in charge of the management and dynamic configuration of I/O parameters and so on.
- III. The power module and interface module are standard for remote I/Os and users can choose the model or brand they prefer.

# **Schneider TM241 Connection Setup**

This section details how to connect a gateway to Schneider TM241. For detailed information regarding



#### i-Designer Program Setup

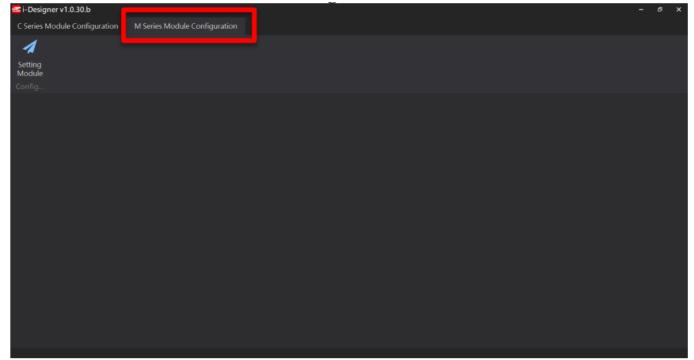
I. Make sure that the module is powered and connected to the gateway module using an Ethernet cable



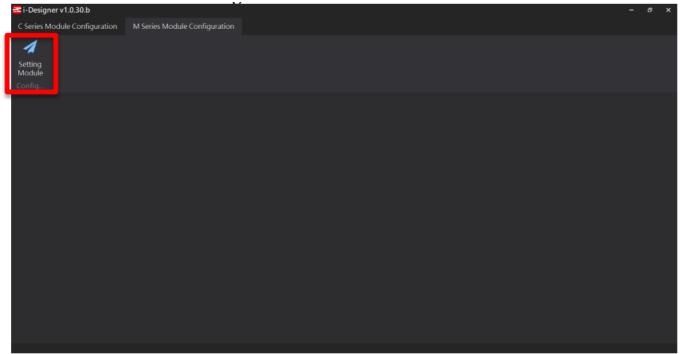
# II. Click to launch the software



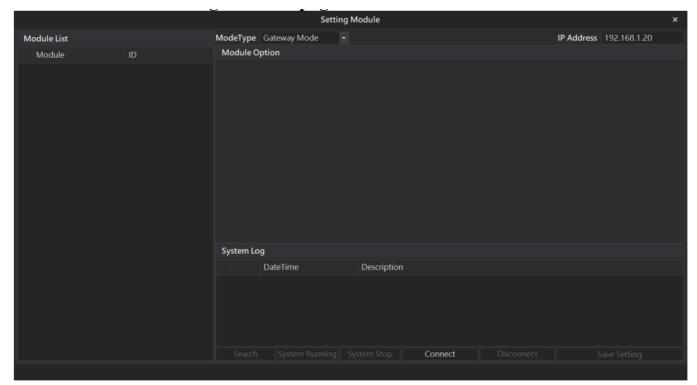
III. Select "M Series Module Configuration"



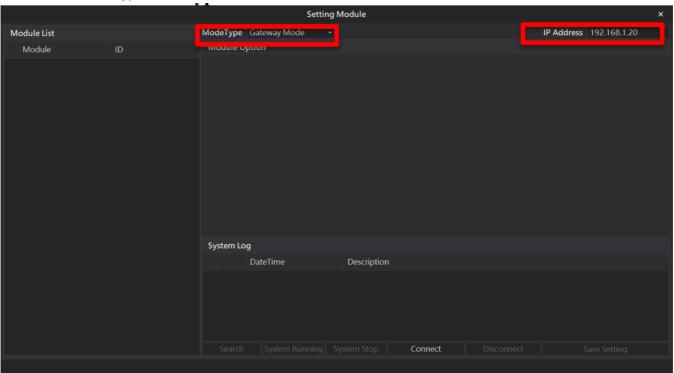
IV. Click on the "Setting Module" icon



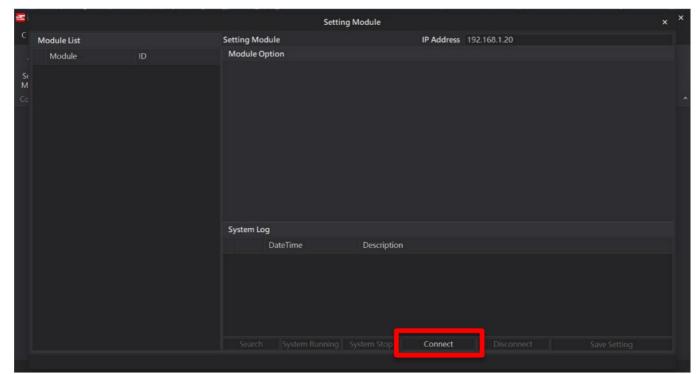
V. Enter the "Setting Module" page for M-series



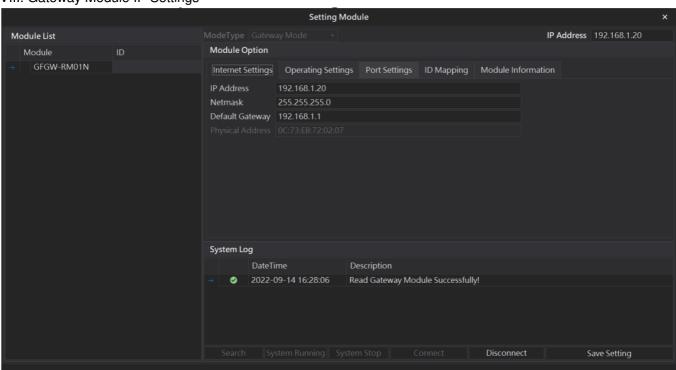
VI. Select the mode type based on the connected module



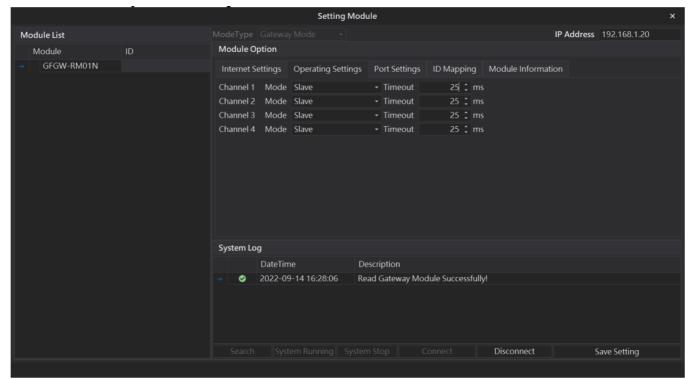
VII. Click on "Connect"



VIII. Gateway Module IP Settings



Note: The IP address must be in the same domain as the controller equipment IX. Gateway Module Operational Modes



#### Note:

Set Group 1 as Slave and set the gateway to use the first set of RS485 port to connect to the main controller(GFMS-RM01N)

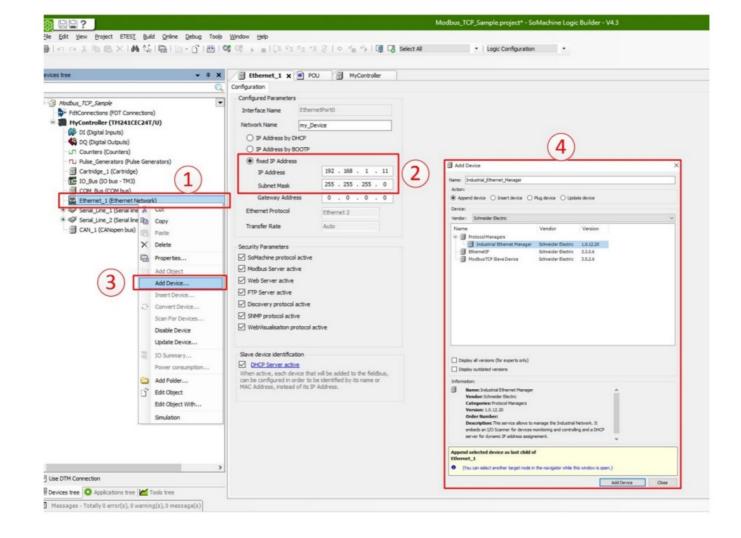
#### **Schneider TM241 Hardware Connections**

This section details how to use the SoMachine program to connect TM241 and i D - G RID //L

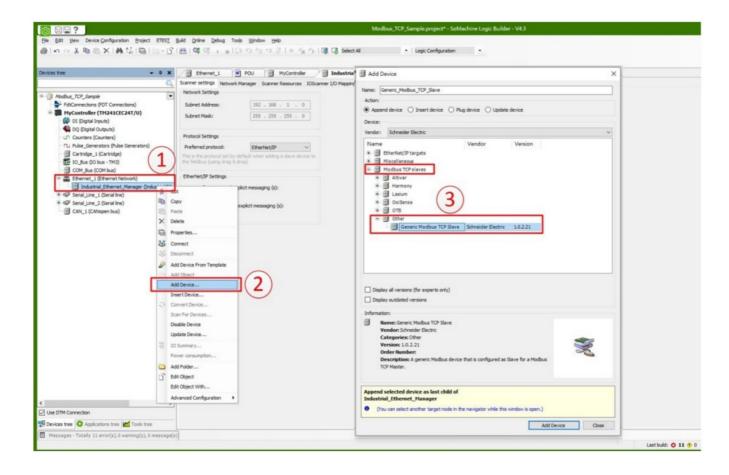
I. Modbus TCP connects with the gateway via the Ethernet cable going through the Ethernet port on the TM241

# Schneider TM241 Connection Setup

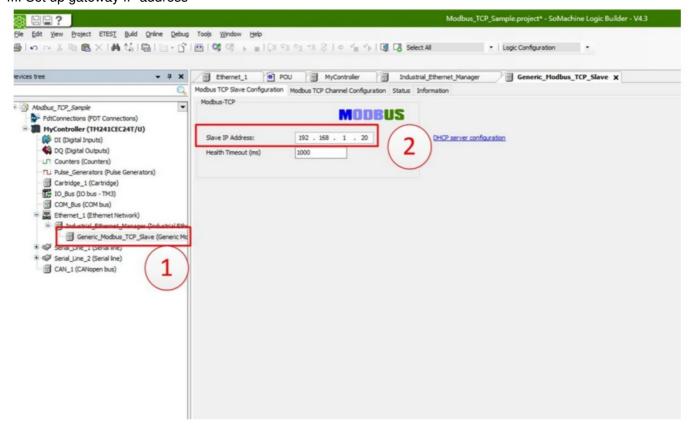
I. Launch SoMachine and click on " " on the right side of the program



- 1. Click on "Ethernet\_1 (EthernetNetwork)"
- 2. Under "fixed IP Address", set up the controller's IP Address and Subnet Mask
- 3. Right-click on "Ethernet\_1 (Ethernet Network)" and then click on "Add Device..."
- 4. In "Protocol Managers", click to add a new "Industrial Ethernet Manager"
- II. Add New Devices

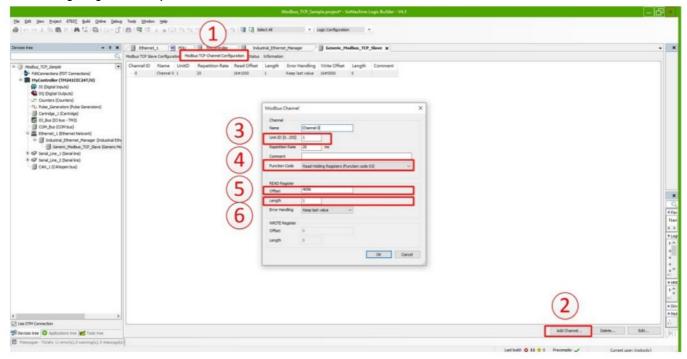


- 1. Right-click on "Industrial Ethernet Manager" and then select "Add Device..."
- 2. Under "Modbus TCP Slaves", click to add a new "Generic Modbus TCP Slave"
- III. Set up gateway IP address



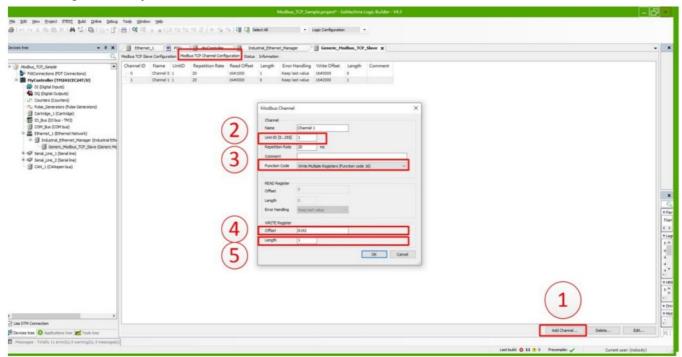
- 1. Select "Generic Modbus TCP Slave"
- 2. Select "Modbus TCP Slave Configuration" and set up the gateway IP address under "Slave IP Address"

# IV. Reading Register Setup



- 1. Select "Modbus TCP Channel Configuration"
- 2. Select "Add Channel..."
- 3. Set up the Master ID under "Unit ID"
- 4. Under "Function Code", select "Read Holding Registers (Function Code 03)"
- 5. In the "Offset" field, enter "4096" for the read register's IP address
- 6. In the "Length" field, set up the data amount for reading

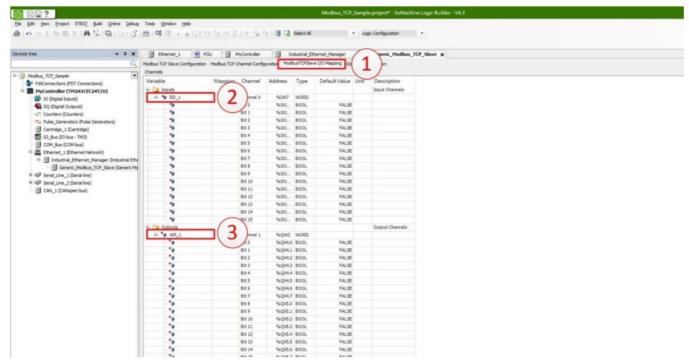
# V. Write Register Setup



- 1. Select "Add Channel..."
- 2. Set up the Master ID under "Unit ID""
- 3. Under "Function Code", select "Write Multiple Registers (Function Code 16)"

- 4. In the "Offset" field, enter "8192" for the Write register's IP address
- 5. In the "Length" field, set up the data amount for writing

### VI. Command Address Mapping



- 1. Select "Modbus TCP Slave I/O Mapping"
- 2. Enter the I/O mapping name in "Input"
- 3. Enter the I/O mapping name in "Output"

### Notes:

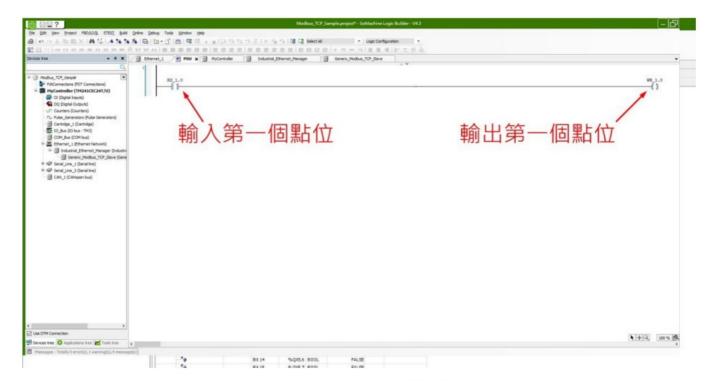
\* i D - G RID // 's first GFDI-RM01N has the register address at 1000(HEX) converted to (DEC) with the starting address at 4096

\* i D - G RID // 's first GFDO-RM01N has the register address at 2000(HEX) converted to (DEC) with the starting address at 8192

### VII. Sample Program

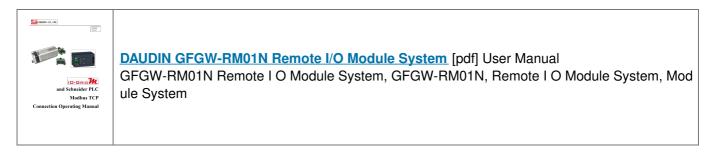
Control with one GFDI-RM01N and one GFDO-RM01N

When the first point of DI has received a signal and is triggered, the first point of DO will output a signal as it is connected





# **Documents / Resources**



Manuals+,