

FSIF–M0(WIFI) Manual

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1. Outline

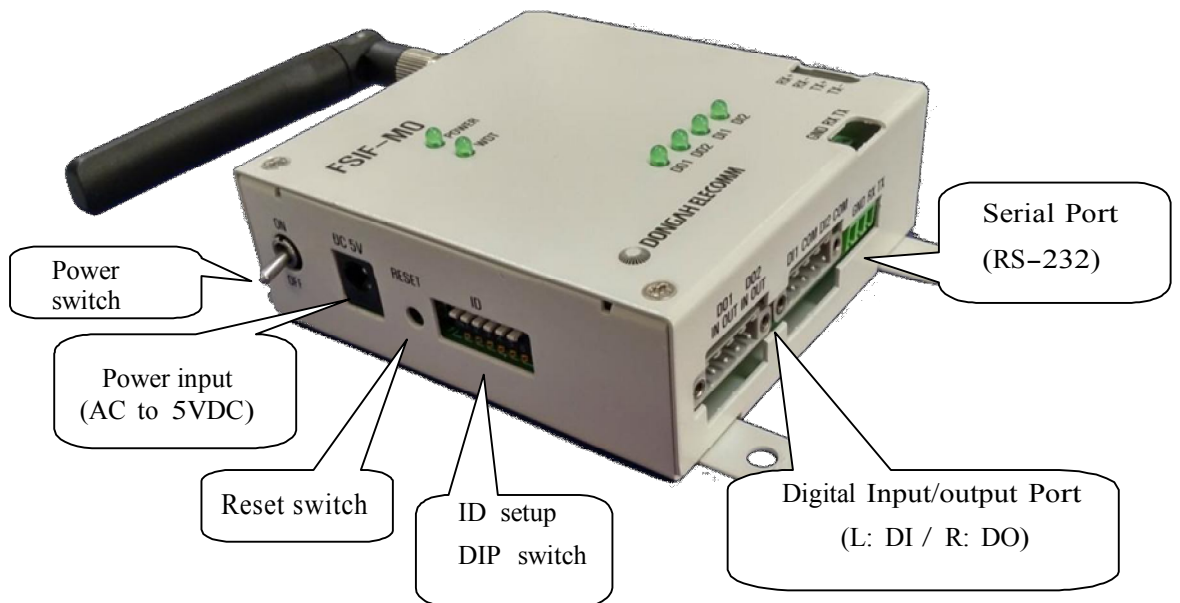
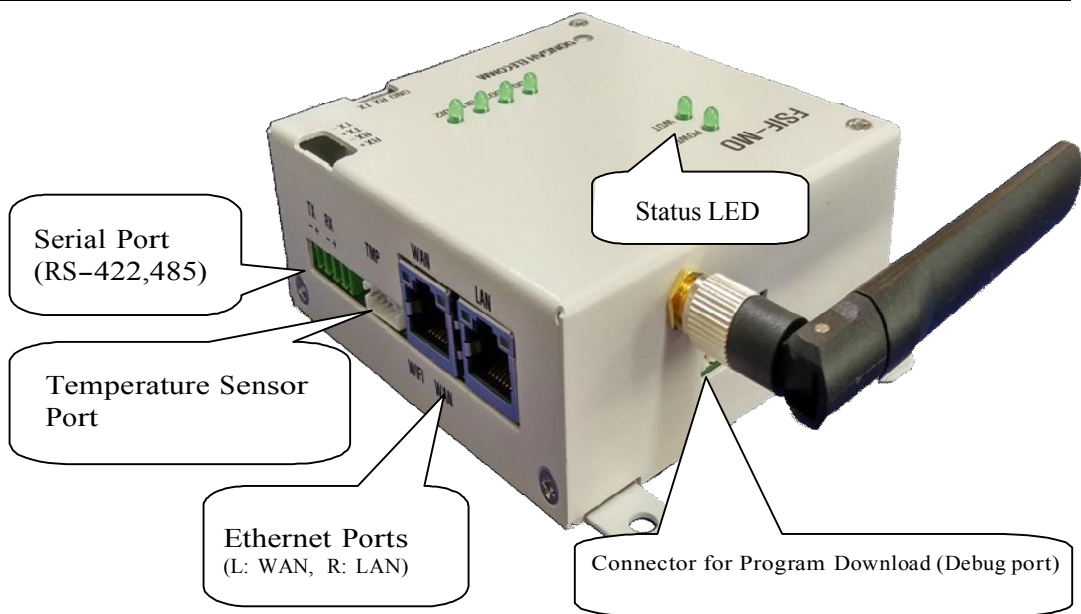
There are many systems developed to monitor and control power, temperature, and humidity of remote equipments. FSIF-M0 (WIFI) can be used to fulfill user's purpose by offering upper level monitoring system and TCP/IP communications and by providing communications among various devices via Modbus/TCP or serial Modbus/TCP.

1.1 Characteristics:

- TCP/IP Communication
- Wi-Fi
- Temperature and humidity measurements
(Require sensors appropriate sensors)
- 1 Serial Port (RS-232,422,485)
- Digital Input/output, monitoring and contact via contact point (2 channels each)

2. The instrument

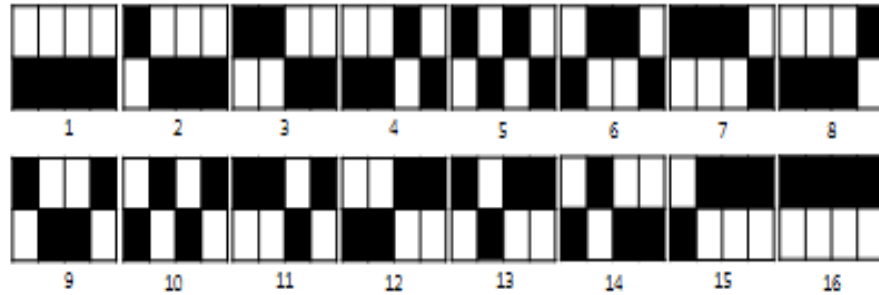




3. ID Setup

3.1 ID Setup and DIP switch setup:

Each ID is setup for distinguishing in case of multiple FSIF-M0(WIFI) instruments. The setup should be as followed. Use only the first 1,2,3,4 from **left**.



4. Wi-Fi IP Setup

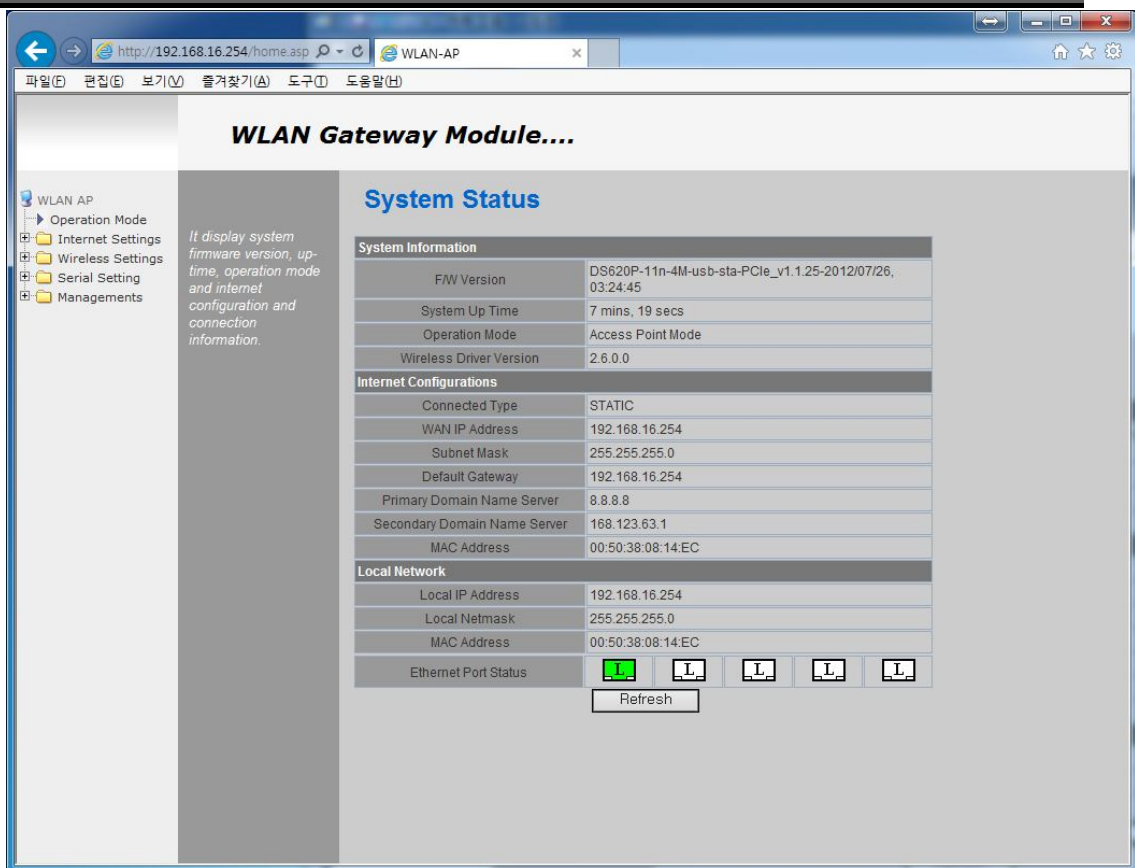
4.1 Initial Wi-Fi module IP: **192.168.16.254**.

4.2 Connect your PC (or laptop) to your FSIF-M0(Wi-Fi) via **WAN** port using LAN cable (**No cross cable**), set your PC's IP to 192.168.16.xxx, and put in 192.168.16.254 in your web browser for initial screen.

4.3 Use ID: **admin** and PW: **admin** for your log-in.

*When you lose your IP address of Wi-Fi module, the **reset switch** can be pressed for about **40 seconds** to reset the IP of the Wi-Fi module.





4.4 Information on Wi-Fi setup can be found in the manual posted on website of WIZnet, the manufacturer.

Web address:

http://www.wiznet.co.kr/sub_modules/kr/product/Product_Detail.asp?cate1=5&cate2=43&cate3=0&pid=1171

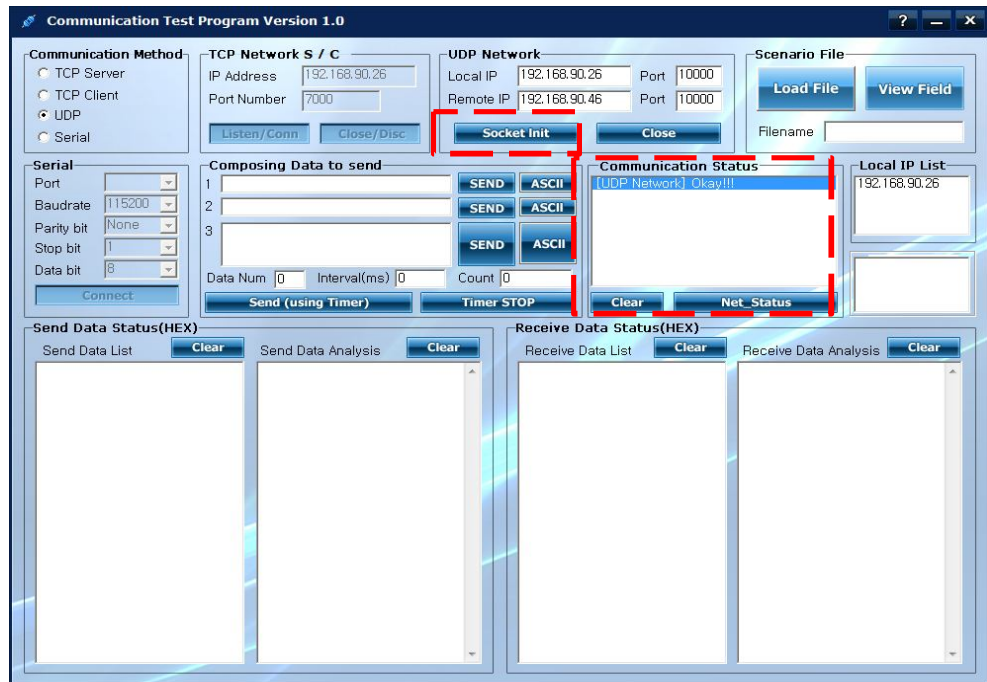
<Wiznet site>

5. Changing and confirming the main IP address of FSIF-M0(WIFI)

5.1 In order to change your IP address a communication program that communicates with FSIF-M0 (Wi-Fi) via **UDP** is necessary.
(**Communication Test Program(v 1.0)** is used in the manual)

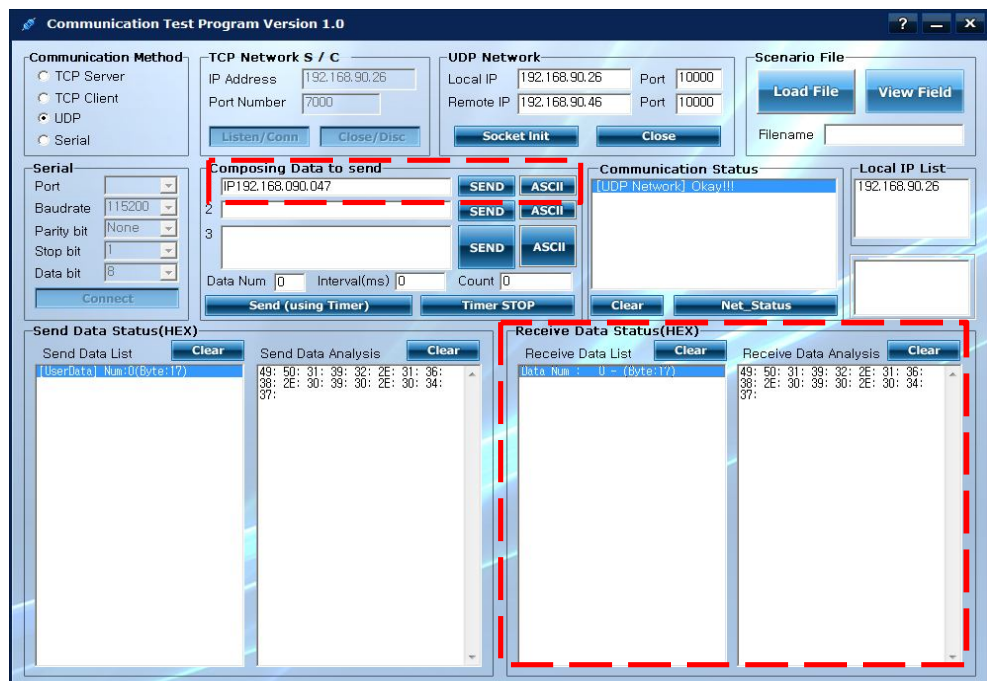
5.2 Connect to FSIF-M0(Wi-Fi) with IP address set up (**Port: 10000**)
e.g., PC IP :192.168.90.26, FSIF-M0(WIFI) IP: 192.168.90.47

5.3 Click "**Socket Init**" in the communication status console, and you will see a message saying "[**UDP Network**] Okay!!!"



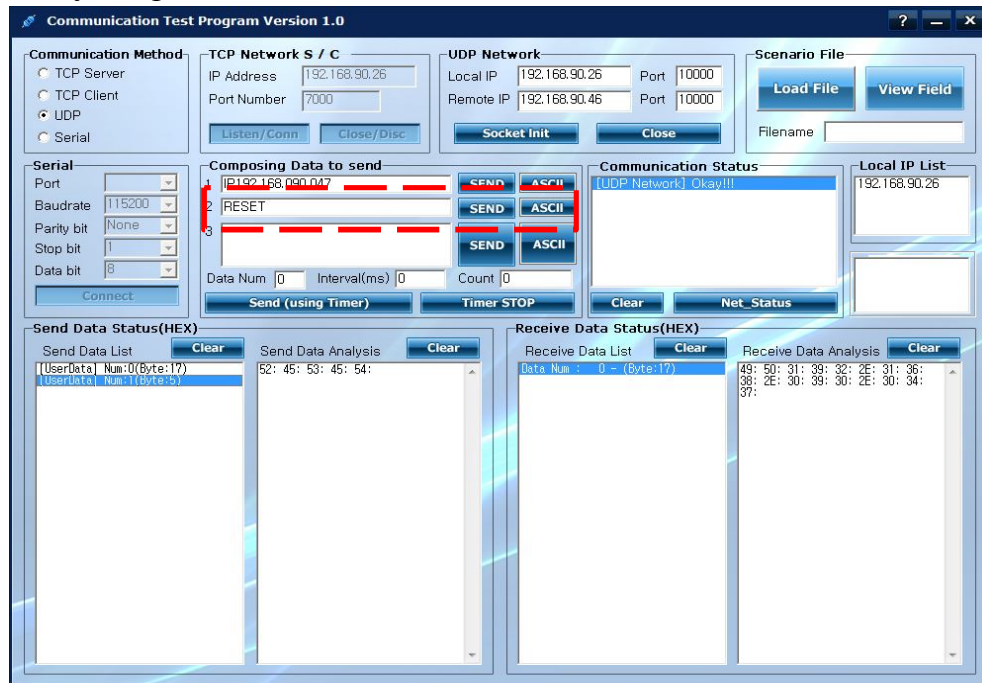
Write the IP address you want to change in “Composing Data to send” and click “send”. e.g., 192.168.090.047

*** Caveats:** IP addresses are written in three digits, so when it is only two digits, “0” must be added in front as a placeholder.

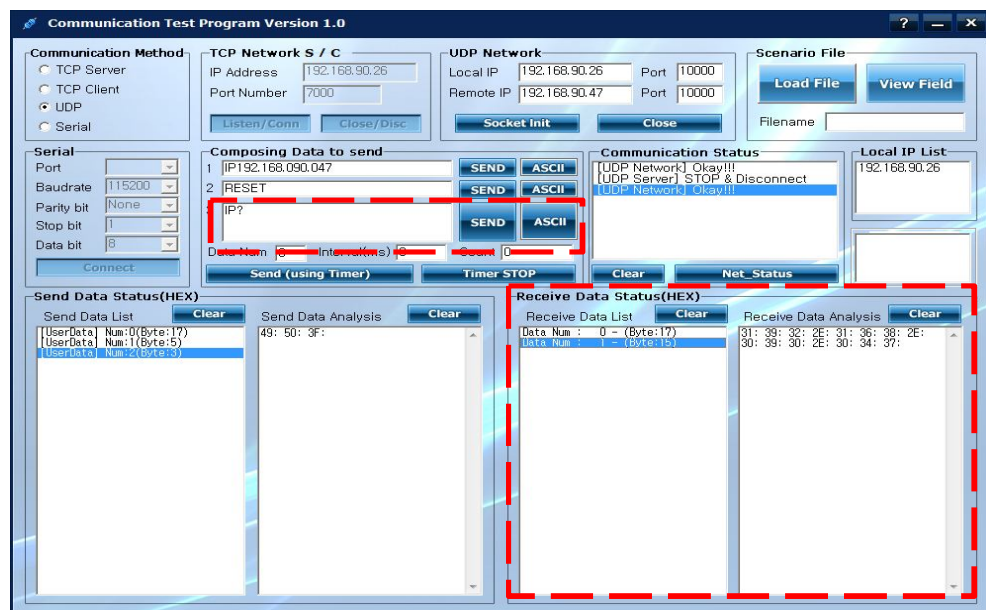


If the communication status is normal, IP address to be changed shows up on the “Analysis” pane in “Receive Data Status” in HEX values

5.4 After you check the IP address to be changed, type in “**RESET**” in “**Composing Data to send**” and click “**send**”, which will restart FSIF-M0 (Wi-Fi) and the IP address will be changed. This time, data will not be received in the “**Analysis**” pane of “**Receive Data Status**”.



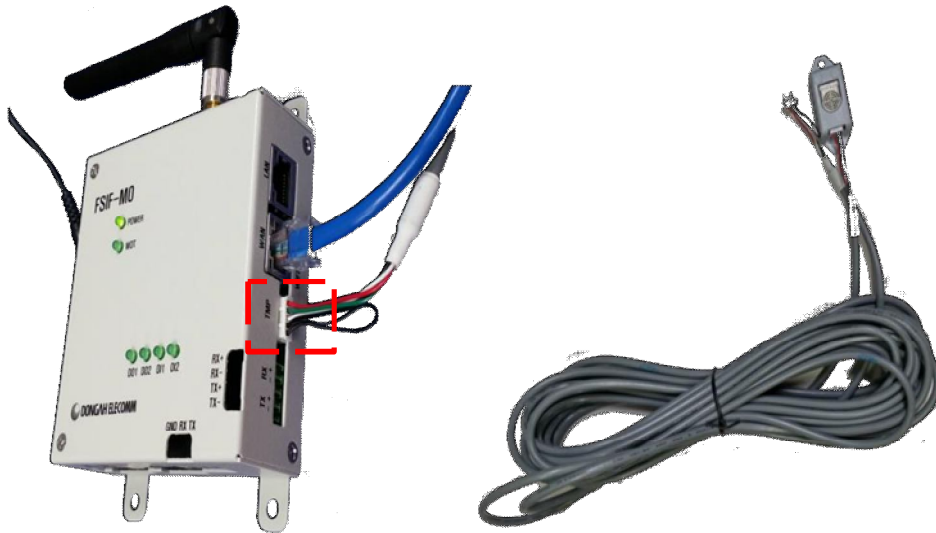
5.5 Once the restart is complete, connect to changed IP address for confirmation. You can type in “**IP?**” in “**Composing Data to send**” and click “**send**” to receive the currently set IP address.



e.g., 31: 39: 32: 2E: 31: 36: 38: 2E: 30: 39: 30: 2E: 30: 34: 37: (192.168.090.047)

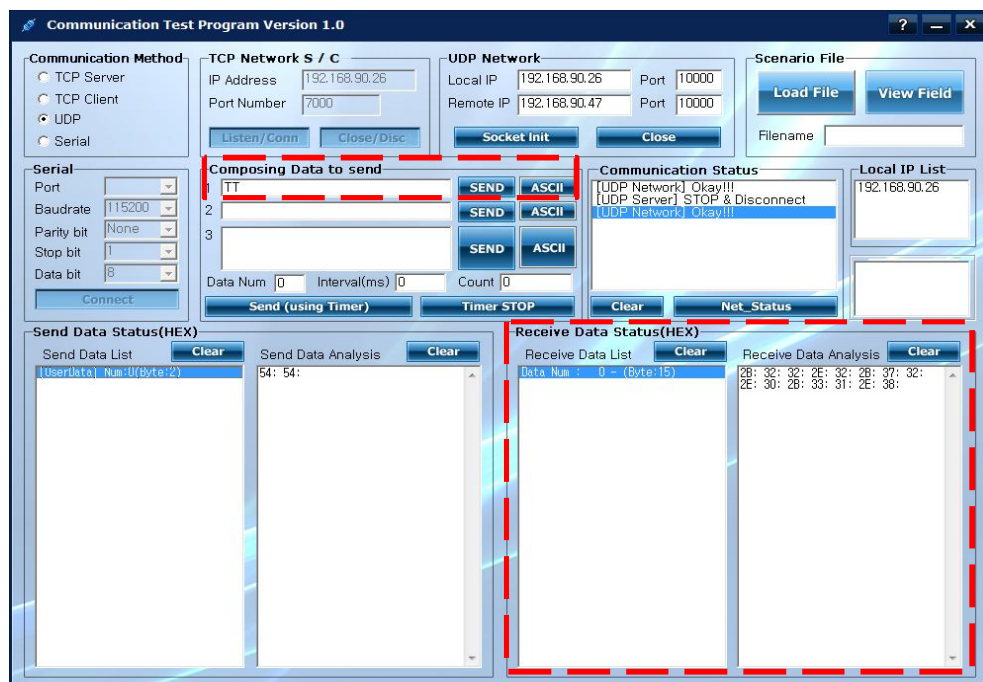
6. Temperature/humidity measurement

- 6.1 Connect a cable to temperature/humidity port and check if measurement signals are being transmitted to the program.



<Connecting temperature/humidity cable > <Temperature/humidity sensor cable>

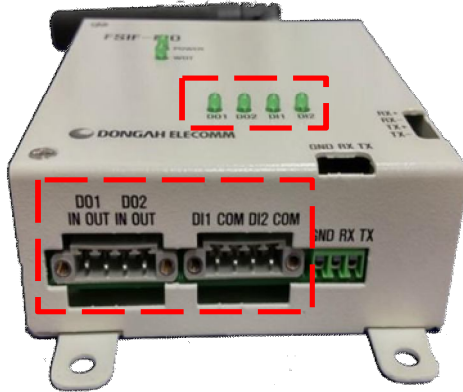
- 6.2 Once FSIF-M0 (Wi-Fi) is connected via **UDP (Port 10000)** and you send **“TT”** in **“Composing Data to send”**, you can receive the measurement signals of temperature/humidity.



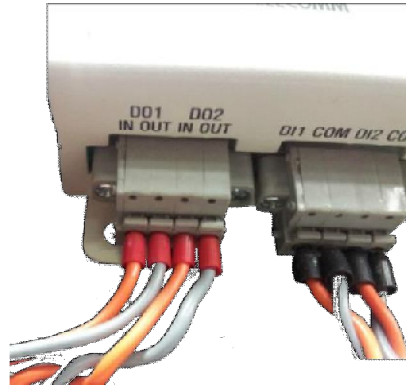
e.g, 2B: 32: 32: 2E: 32: 2B: 37: 32: 2E: 30: 2B: 33: 31: 2E: 38:
(+22.2+72.0+31.8 Celsius/Fahrenheit/Humidity)

7. Connecting digital input/output

7.1 There are two channels each for digital input / output. It operates by direct contact, and can be operated using relay when necessary.

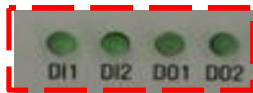


<DO/DI Port>



<DO/DI Connectors>

7.2 Operation status can be checked through status LED on the front, and you can know which equipments are on or off from **DI1** and **DI2**



8. NOTICE

This device complies with part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device is not intended for use in the direct field of view at visual display workplace. To avoid incommoding reflexions at visual display workplaces this device must not be placed in the direct field of view.

CAUTION

THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.