

2105TW V1.0.1





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# **1. USB Converter List**

| Product No. | Description                           | Remarks |
|-------------|---------------------------------------|---------|
| GFTL-RM01   | Converts USB signals to RS232 signals |         |
| GFTL-RM02   | Converts USB signals to RS485 signals |         |



## 2. USB Converter Information

### **2.1 Setup Panel Information**

I. GFTL-RM01

Converts USB signal to RS232 signal with Micro USB cable





I. GFTL-RM02



| Wiring Range<br>(IEC/UL) | 0.14 ~ 1.5mm²<br>/AWG 28 ~ 16 |
|--------------------------|-------------------------------|
| Wiring ferrules          | DN00510D                      |
|                          | DN00710D                      |





# 3. GFTL-RM01 Instructions



I. Connect the I/O module to your computer

II. Open the <u>iO-GRID M Utility</u> software and click on "Tools" to open the "Tools" page

| 建建 永田道行 | 1/0模組參數設定介面           |                                       |
|---------|-----------------------|---------------------------------------|
|         | ·                     | · · · · · · · · · · · · · · · · · · · |
|         | 和約600-<br>188-1年: bps | 通职: v bps                             |
|         | 格式                    | 格式: ~ ~                               |
|         | 讓取模組 設定模組             | 按釋模組 設定模組                             |
| 模組運行紀錄  | Home Will I.R.        |                                       |



| 置連線 系統運行                        | or units of the second se | a numerican a second |
|---------------------------------|--|---|
|                                 | <ul> <li>⊗ 站號: 4</li> <li>⑧ 速率: 1.5M ∨ bps</li> <li>◎ 格式: RTU(8,N,1) ∨</li> </ul>  | 速率: bps<br>格式: ~  |
| ¥ι σ28                          | 調取模組<br>設定模組<br>Home 模組 工具   | 搜尋模組 設定模組   |
| 県型 時間<br>−般 2019-06-11 14:46:56 | 訊息<br>讀取模組資料完成   |   |

#### III. Click on "Read the Module" and set up the module parameters

- (A) Set up station numbers as planned
- <sup>(B)</sup> Select the baud rate in the drop-down menu
- $\bigcirc$  Select the "RTU (8,N,1)" format in the drop-down menu

%No repetitive station numbers on the same DINKLE Bus

% When using control modules, the baud rate can be set at 1.5M bps

#### IV. Click on "Set Up the Module" to complete the setup process



## 4. GFTL-RM02 Instructions

GFTL-RM02 can convert USB signals to RS485 signals

I. Use GFTL-RM02 and 0170-0101 to convert 485 signals to RJ45



II. Connect GFTL-RM02 to a computer and then connect RJ45 to a control module





III. Open "Control Panel" on your computer and click on "Device Manager" to

view the connected CommPort



### IV. Open iO-GRID M Utility and click on "Connected Devices". Then select "Connect

**RS485**" and choose its ComPort



When using RS485 to set up a control module, it can only connect to RS485#1



- V. Once successfully connected, you can set up the module. For detailed setting instructions, please refer to the *iO-GRID M Utility User Manual*
- VI. You can also use other Modbus testing software in the market. As long as the software has the same settings as the control module, they can communicate with each other.

| ₩ Modbus 測試軟體   | - 🗆 X                              |
|---|------------------------------------|
| <ul> <li>通訊埠</li> <li>COM埠: COM11 ▼</li> <li>通訊速度: 115200 ▼</li> <li>通訊協定: N.8.1 ▼</li> </ul> | <b>時間設定</b><br>時間: 100 ms<br>敗動 停止 |
| 輸入資料(CRC検査碼不用輸入): 01 03 00 00 00 01   | 傳送 清除                              |
| 傳送資料:   | 4:                                 |
|   | 關於離開                               |



### VII. Send (test) the reading and writing commands

| 🙀 Modbus 測試軟體  |                                      |  |   | _     |           |
|--|--------------------------------------|--|---|-------|-----------|
| <b>通訊埠</b><br>COM埠: COM11  ▼<br>通訊速度: 115200  ▼<br>通訊協定: N.8.1  ▼                              | 開啟 通訊 <sup>1</sup><br><b>關閉 通訊</b> 1 | 埠<br>埠   | <b>時間設定</b><br>時間: 1<br><u> </u>          | 100 「 | ms<br>5⊥L |
| 輸入資料(CRC檢查碼不用輸入): 01 1<br>傳送資料:<br>01 03 10 00 00 01 80 CA<br>01 10 20 00 00 01 02 FF FF 86 22 | 0 20 00 00                           | 9 01 02 FF F<br><u>穿收資料:</u><br>01 03 02 00<br>01 10 20 00 | F (明) | 送     | <u>清除</u> |
|  | Ť                                    |  | 關方  | ¢;    | 離開        |