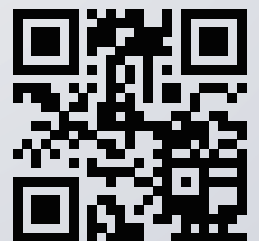


# A Series Remote Modules

Catalogue • 2023. 03



WIFI/ETHERNET/RS-485 Remote Modules

eAutomation Solution

Yottacontrol Co.

# Remote Modules

## WIFI Analog I/O Remote Modules

### A-12x Series/A-3290



#### OVERVIEW

- ※ Analog Input 16-bit Resolution ,Burn-out Detection
- ※ Analog Output 12-bit Resolution
- ※ Support Analog Input/Output 0/4 ~20mA or 0~10V
- ※ Support PT-100 Or PT-1000 (2/3/4-wired)
- ※ Support J, K, T, E, R, S, B Thermocouple
- ※ Support 10K/6.8K/4.7K/3.3K/2.7K/2.25K/2.1K/2K/1.5K/1K Thermistor
- ※ WIFI Interface + RS-485 Interface + USB Interface
- ※ Hi-Speed RS-485 Interface (Max 921600bps)
- ※ Standard 2.4GHz IEEE 802.11 b/g (Wi-Fi)
- ※ Built-in Step Motor Driver, Connect Directly
- ※ Output Over Current Protection (OCP)
- ※ Output Over Thermal Protection (OTP)
- ※ Output Under Voltage Lockout (UVLO)
- ※ Support MODBUS TCP/IP, UDP/IP ,RTU ,ASCII
- ※ Able To Connect Wi-Fi AP, Internet Of Things (IoT), Industry 4.0
- ※ A-3290 Can Be Directly Connected To The Control Output, Without Any Controller
- ※ Free Monitor PC Software "YottaUtility"



For more information, please refer to

[www.yottacontrol.com](http://www.yottacontrol.com)

| Type                              | A-1251<br>DI                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A-1212<br>A-1213<br>ADIO                                   | A-1219<br>A-1220<br>ADIO                                            | A-1255/<br>A-1255S<br>ADIO                                 | A-1260<br>ADIO                                             | A-1269<br>ADIO           | A-3290<br>Wi-Fi Two-Way<br>communicate<br>Transmitter |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|--------------------------|-------------------------------------------------------|
| Operation Voltage                 | 10~30VDC/24VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10~30VDC/24VAC                                             | 10~30VDC/24VAC                                                      | 10~30VDC/24VAC                                             | 10~30VDC/24VAC                                             | 10~30VDC/24VAC           | AA Battery *2                                         |
| Inputs                            | 16*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC                                                                                                                                                                                                                                                                                                                                                                                                                              | 2*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 4*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC          | 8*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 7*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | ---                      | 7*Isolation DI                                        |
| Outputs                           | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2*(Transistor)                                             | ---                                                                 | 4*(Motor Driver)<br>4*(Source Driver)                      | 4*(Power Relay)                                            | 8*(Power Relay)          | ---                                                   |
| Continuous Current                | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 10-35VDC(1A)                                               | ---                                                                 | 8-60VDC(1.75A)<br>/10-40VDC(1A)                            | 250VAC(7A)<br>/30VDC(7A)                                   | 250VAC(5A)<br>/30VDC(5A) | ---                                                   |
| Communication Baud Rate           | 2400~921600bps                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                            |                                                                     |                                                            |                                                            |                          | WIFI b/g                                              |
| Isolation                         | YES(5000VDC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                            |                                                                     |                                                            |                                                            |                          |                                                       |
| Input Operating Frequency         | 10HZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                            |                                                                     |                                                            |                                                            |                          | 5HZ                                                   |
| Output Operating Frequency        | Transistor:10HZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                            |                                                                     |                                                            |                                                            |                          | ---                                                   |
| Operation Temperature             | -20 to +75 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                            |                                                                     |                                                            |                                                            |                          | -20 to +75 °C                                         |
| Degree Of Protection              | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                            |                                                                     |                                                            |                                                            |                          | IP66                                                  |
| Installation                      | 35 mm DIN rail or Flush mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                            |                                                                     |                                                            |                                                            |                          | ---                                                   |
| Dimension (W x H x D mm)          | 76.4*118.2*38.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                            |                                                                     |                                                            |                                                            |                          | 120*55*30 mm                                          |
| Analog Inputs                     | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4 (16-bit)                                                 | 8 (16-bit)                                                          |                                                            | 4 (12-bit)                                                 |                          | ---                                                   |
| Analog Input Type                 | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2*0/4~20mA<br>2*0/2~10V<br>2*PT-100/1000<br>(-200~+600°C)  | 0/4~20mA, J,K,T,E,R<br>,S,B,Thermistor<br>(-270~+1800°C)<br>0/2~10V |                                                            | 4* 0~10V                                                   |                          | ---                                                   |
| Analog Outputs                    | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2 (12-bit)                                                 | ---                                                                 |                                                            | ---                                                        |                          | ---                                                   |
| Analog Output Type                | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0/4 ~20mA                                                  | ---                                                                 |                                                            | ---                                                        |                          | ---                                                   |
| Input Impedance                   | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Current: 100 Ω<br>RTD : 10 MΩ                              | Current: 100 Ω<br>Voltage : 10 MΩ                                   |                                                            | Voltage:10 MΩ                                              |                          | ---                                                   |
| Analog Input / Outpu Accuracy     | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ±0.1% / ±1%                                                | ±0.1% / ---                                                         |                                                            | ±1% / ---                                                  |                          | ---                                                   |
| Interface                         | WIFI + RS-485 + USB                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                            |                                                                     |                                                            |                                                            |                          | WIFI + USB                                            |
| Channel Independent Configuration | YES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                            |                                                                     |                                                            |                                                            |                          | ---                                                   |
| Sampling Rate                     | 10 sample/second (total)                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                            |                                                                     |                                                            |                                                            |                          | ---                                                   |
| CMR @ 50/60 Hz                    | 120 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                            |                                                                     |                                                            |                                                            |                          | ---                                                   |
| Span Drift                        | ±50 ppm/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                            |                                                                     |                                                            |                                                            |                          | ---                                                   |
| Zero Drift                        | ±18 μV/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                            |                                                                     |                                                            |                                                            |                          | ---                                                   |
| Temperature Ranges                | (PT-100:-200~600°C) (PT-1000:-200~600°C) (J:-210~760°C) (K:-270~1370°C) (T:-270~400°C) (E:-270~1000°C) (R:0~1750°C) (S:0~1750°C) (B:0~1800°C) (Thermistor-10K-T2:0~100°C) (Thermistor-10K-T3:0~100°C) (Thermistor-6.8K:-10~100°C) (Thermistor-4.7K:-10~100°C) (Thermistor-3.3K:-20~100°C) (Thermistor-3K:-20~100°C) (Thermistor-2.7K:-20~100°C) (Thermistor-2.25K:-20~100°C) (Thermistor-2.1K:-30~100°C) (Thermistor-2K:-30~100°C) (Thermistor-1.5K:-40~100°C) (Thermistor-1K:-40~100°C) |                                                            |                                                                     |                                                            |                                                            |                          |                                                       |

## Remote Modules

### ETHERNET Analog I/O Remote Modules

#### A-18x Series



#### OVERVIEW

- ※ Analog Input 16-bit Resolution
- ※ Analog Output 12-bit Resolution
- ※ Support Analog Input/Output 0/4 ~20mA or 0~10V
- ※ Support PT-100 Or PT-1000 (2/3/4-wired)
- ※ Support J, K, T, E, R, S, B Thermocouple
- ※ Support 10K/6.8K/4.7K/3.3K/3K/2.7K/2.252K/2.1K/2K/1.5K/1K Thermistor
- ※ Burn-out Detection
- ※ Ethernet Interface + USB Interface
- ※ Supports 8 Independent Sockets Simultaneously
- ※ Remote Monitoring And Control With Mobile Devices
- ※ Built-in Step Motor Driver, Connect Directly
- ※ Output Over Current Protection (OCP)
- ※ Output Over Thermal Protection (OTP)
- ※ Output Under Voltage Lockout (UVLO)
- ※ Support MODBUS TCP/IP, MODBUS RTU
- ※ Flexible User-defined Modbus address
- ※ Support LAN 10/100 Mbps Communication Rate
- ※ Free Monitor PC Software "YottaUtility"



For more information, please refer to

[www.yottacontrol.com](http://www.yottacontrol.com)

| Type                              | A-1851                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A-1812                                                     | A-1819                                                             | A-1855/A-1855S                                             | A-1860                                                     | A-1869               |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|----------------------|
|                                   | DI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AIO                                                        | AIO                                                                | DIO                                                        | DIO                                                        | DIO                  |
| Operation Voltage                 | 10~30VDC/24VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10~30VDC/24VAC                                             | 10~30VDC/24VAC                                                     | 10~30VDC/24VAC                                             | 10~30VDC/24VAC                                             | 10~30VDC/24VAC       |
| Inputs                            | 16*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | ---                                                                | 8*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 8*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | ---                  |
| Outputs                           | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ---                                                        | ---                                                                | 4*(Motor Driver/Source)                                    | 4*(Power Relay)                                            | 8*(Power Relay)      |
| Continuous Current                | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ---                                                        | ---                                                                | 8-60VDC(1.75A)<br>/10-40VDC(1A)                            | 250VAC(7A)/30VDC(7A)                                       | 250VAC(7A)/30VDC(7A) |
| Communication Baud Rate           | 10/100Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                            |                                                                    |                                                            |                                                            |                      |
| Isolation                         | YES(5000VDC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                            |                                                                    |                                                            |                                                            |                      |
| Input Operating Frequency         | 10HZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                            |                                                                    |                                                            |                                                            |                      |
| Output Operating Frequency        | Transistor:10HZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                            |                                                                    |                                                            |                                                            |                      |
| Operation Temperature             | -20 to +75 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                            |                                                                    |                                                            |                                                            |                      |
| Degree Of Protection              | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                            |                                                                    |                                                            |                                                            |                      |
| Installation                      | 35 mm DIN rail or Flush mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                            |                                                                    |                                                            |                                                            |                      |
| Dimension (W x H x D mm)          | 76.4*118.2*38.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                            |                                                                    |                                                            |                                                            |                      |
| Analog Inputs                     | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4 (16-bit)                                                 | 8 (16-bit)                                                         | ---                                                        | ---                                                        | ---                  |
| Analog Input Type                 | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2* 0/4~20mA<br>2* PT-100/1000<br>(-200 ~ +600°C)           | 0/4~20mA, J, K, T, E, R,<br>, S, B, Thermistor<br>(-270 ~ +1800°C) | ---                                                        | ---                                                        | ---                  |
| Analog Outputs                    | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2 (12-bit)                                                 | ---                                                                | ---                                                        | ---                                                        | ---                  |
| Analog Output Type                | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0/4 ~20mA                                                  | ---                                                                | ---                                                        | ---                                                        | ---                  |
| Input Impedance                   | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Current: 100 Ω<br>RTD : 10 MΩ                              | Current: 100 Ω<br>Voltage : 10 MΩ                                  | ---                                                        | ---                                                        | ---                  |
| Analog Input /Output Accuracy     | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ±0.1% / ±1%                                                | ±0.1% / ---                                                        | ---                                                        | ---                                                        | ---                  |
| Interface                         | Ethernet + USB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                            |                                                                    |                                                            |                                                            |                      |
| Channel Independent Configuration | YES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                            |                                                                    |                                                            |                                                            |                      |
| Sampling Rate                     | 10 sample/second (total)                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                            |                                                                    |                                                            |                                                            |                      |
| CMR @ 50/60 Hz                    | 120 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                            |                                                                    |                                                            |                                                            |                      |
| Span Drift                        | ±50 ppm/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                            |                                                                    |                                                            |                                                            |                      |
| Zero Drift                        | ±18 μV/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                            |                                                                    |                                                            |                                                            |                      |
| Temperature Ranges                | (PT-100:-200~600°C) (PT-1000:-200~600°C) (J:-210~760°C) (K:-270~1370°C) (T:-270~400°C) (E:-270~1000°C) (R:0~1750°C) (S:0~1750°C) (B:0~1800°C)<br>(Thermistor-10K-T2:0~100°C) (Thermistor-10K-T3:0~100°C) (Thermistor-6.8K:-10~100°C) (Thermistor-4.7K:-10~100°C) (Thermistor-3.3K:-20~100°C)<br>(Thermistor-3K:-20~100°C) (Thermistor-2.7K:-20~100°C) (Thermistor-2.252K:-20~100°C) (Thermistor-2.1K:-30~100°C) (Thermistor-2K:-30~100°C)<br>(Thermistor-1.5K:-40~100°C) (Thermistor-1K:-40~100°C) |                                                            |                                                                    |                                                            |                                                            |                      |

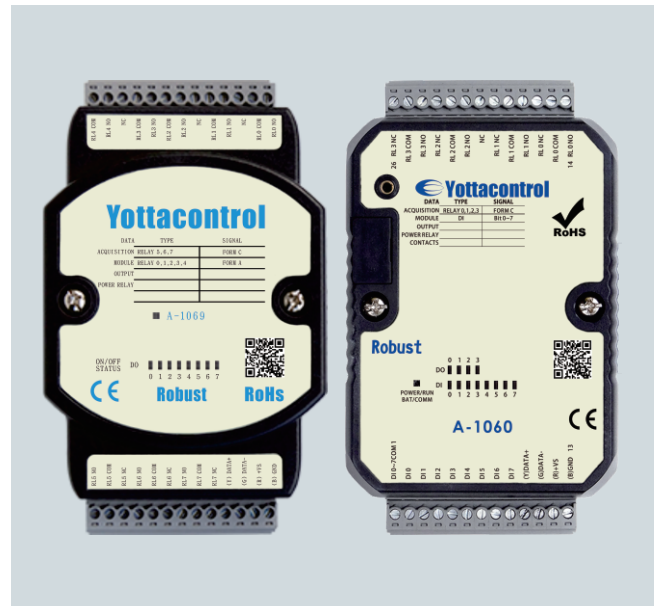
# Remote Modules

## RS-485 I/O Remote Modules

### A-10x Series

#### OVERVIEW

- ※ Use for Yottacontrol Whole Series Controller
- ※ RS-485 Interface
- ※ Supports Modbus RTU / ASCII
- ※ LED Indicator
- ※ Operation Temperature -20~+75°C
- ※ Isolation Voltage: 5000 V DC
- ※ Surge , EFT And ESD Protection
- ※ Dual Watchdog Timer
- ※ Low Power Indicator
- ※ Operation Range: Up To 1200 Meters
- ※ Free Monitor PC Software "YottaUtility"



For more information, please refer to

[www.yottacontrol.com](http://www.yottacontrol.com)

| Type                       | A-1057                           | A-1058               | A-1068                 | A-1069               | A-1051                                                      | A-1051+<br>(isolated RS485)                                 |
|----------------------------|----------------------------------|----------------------|------------------------|----------------------|-------------------------------------------------------------|-------------------------------------------------------------|
|                            | DO                               | DO                   | DO                     | DO                   | DI                                                          | DIO                                                         |
| Operation Voltage          | 10~30VDC/24VAC                   | 10~30VDC/24VAC       | 10~30VDC/24VAC         | 10~30VDC/24VAC       | 10~30VDC/24VAC                                              | 10~30VDC/24VAC                                              |
| Inputs                     | ---                              | ---                  | ---                    | ---                  | 16*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 16*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC |
| Outputs                    | 12 (Source Transistor)           | 12 (Sink Transistor) | 8 (Signal Relay)       | 8 (Power Relay)      | ---                                                         | ---                                                         |
| Continuous Current         | 10-35VDC(1A)                     | 10-40VDC(200mA)      | 120VAC(0.5A)/30VDC(1A) | 250VAC(5A)/30VDC(1A) | ---                                                         | ---                                                         |
| Communication Baud Rate    | 1200~115200bps                   |                      |                        |                      |                                                             |                                                             |
| Isolation                  | YES(5000VDC)                     |                      |                        |                      |                                                             |                                                             |
| Input Operating Frequency  | 10HZ                             |                      |                        |                      |                                                             |                                                             |
| Output Operating Frequency | Relay:10HZ / Transistor:10HZ     |                      |                        |                      |                                                             |                                                             |
| Operation Temperature      | -20 to +75 °C                    |                      |                        |                      |                                                             |                                                             |
| Degree Of Protection       | IP20                             |                      |                        |                      |                                                             |                                                             |
| Installation               | 35 mm DIN rail or Flush mounting |                      |                        |                      |                                                             |                                                             |
| Dimension (W x H x D mm)   | 76.4*118.2*38.5 mm               |                      |                        |                      |                                                             |                                                             |

| Type                       | A-1055                                                     | A-1055S                                                    | A-1060                                                     | A-1080<br>(Lighting Relay<br>Controller) |
|----------------------------|------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|------------------------------------------|
|                            | DIO                                                        | DIO                                                        | DIO                                                        |                                          |
| Operation Voltage          | 10~30VDC/24VAC                                             | 10~30VDC/24VAC                                             | 10~30 VDC/24VAC                                            | 10~30 VDC/24VAC                          |
| Inputs                     | 8*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 8*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 8*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC |                                          |
| Outputs                    | 8 (Sink Transistor)                                        | 8 (Source Transistor)                                      | 4 (Power Relay)                                            | 8 (HID Relay)                            |
| Continuous Current         | 10-35VDC(1A)                                               | 10-35VDC(1A)                                               | 250VAC(5A)/30VDC(5A)                                       |                                          |
| Communication Baud Rate    | 1200~115200bps                                             |                                                            |                                                            | 2400~921600bps                           |
| Isolation                  | YES(5000VDC)                                               |                                                            |                                                            | YES(5000VDC)                             |
| Input Operating Frequency  | 10HZ                                                       |                                                            |                                                            | 10HZ                                     |
| Output Operating Frequency | Relay:10HZ/Transistor:10HZ                                 |                                                            |                                                            | Function Key:8                           |
| Operation Temperature      | -20 to +75°C                                               |                                                            |                                                            | -20 to +75°C                             |
| Degree Of Protection       | IP20                                                       |                                                            |                                                            | IP20                                     |
| Installation               | 35mm DIN rail or Flush mounting                            |                                                            |                                                            | 35mm DIN rail or Flush mounting          |
| Dimension (W x H x D mm)   | 76.4*118.2*38.5 mm                                         |                                                            |                                                            | 76.4*118.2*38.5 mm                       |



## Remote Modules

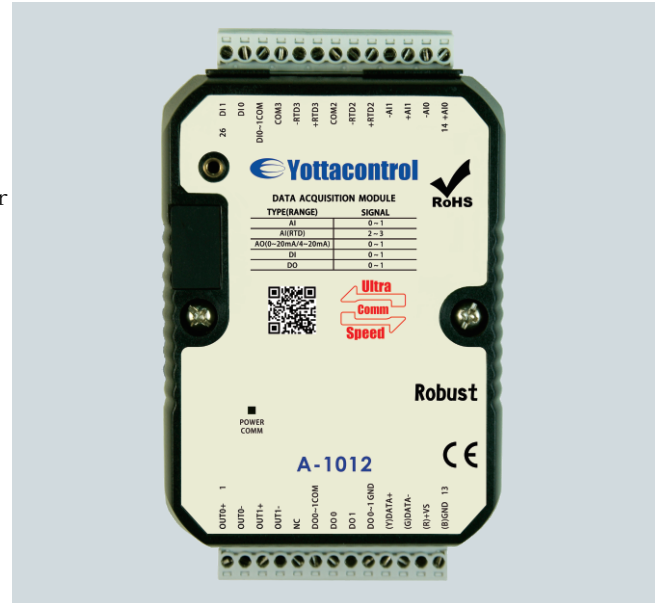
### RS-485 Analog I/O Remote Modules

#### A-10x Series

4

##### OVERVIEW

- ※ Analog Input 16-bit Resolution
- ※ Analog Output 12-bit Resolution
- ※ Support Analog Input/Output 0/4 ~20mA Or 0~10V
- ※ Support PT-100 Or PT-1000 (2/3/4-wired)
- ※ Support J, K, T, E, R, S, B Thermocouple
- ※ Support 10K/6.8K/4.7K/3.3K/3K/2.7K/2.252K/2.1K/2K/1.5K/1K Thermistor
- ※ Burn-out Detection
- ※ RS-485 Interface + USB Interface
- ※ Hi-Speed RS-485 Interface (Max 921600bps)
- ※ Supports Modbus RTU / ASCII
- ※ LED Indicator
- ※ Operation Temperature -20~+75°C
- ※ Isolation Voltage: 5000 V DC
- ※ Surge , EFT And ESD Protection
- ※ Dual Watchdog Timer
- ※ Low Power Indicator
- ※ Operation Range: Up To 1200 Meters
- ※ Free PC Software "YottaUtility"



For more information, please refer to

[www.yottacontrol.com](http://www.yottacontrol.com)

| Type                              | A-1010<br>A-1010+<br>ADIO                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A-1012<br>A-1012+<br>ADIO                                  | A-1013<br>ADIO                                             | A-1019<br>A-1019+<br>ADIO                                           | A-1020<br>ADIO                                             | A-1036+<br>AO     | A-1038+<br>AO     |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------|-------------------|-------------------|
| Operation Voltage                 | 10~30VDC/24VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 10~30VDC/24VAC                                             | 10~30VDC/24VAC                                             | 10~30VDC/24VAC                                                      | 10~30VDC/24VAC                                             | 10~30VDC/24VAC    | 10~30VDC/24VAC    |
| Inputs                            | ---                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 2*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | 4*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC          | 4*Isolation DI<br>status low:<1VDC<br>status high:>5~30VDC | ---               | ---               |
| Outputs                           | 4*(Transistor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2*(Transistor)                                             | 2*(Transistor)                                             | ---                                                                 | ---                                                        | ---               | ---               |
| Continuous Current                | 10~40VDC(200mA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10~35VDC(1A)                                               | 10~35VDC(1A)                                               | ---                                                                 | ---                                                        | ---               | ---               |
| Communication Baud Rate           | 2400~921600bps                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Isolation                         | YES(5000VDC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Input Operating Frequency         | 10HZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Output Operating Frequency        | Transistor:10HZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Operation Temperature             | -20 to +75 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Degree Of Protection              | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Installation                      | 35 mm DIN rail or Flush mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Dimension (W x H x D mm)          | 76.4*118.2*38.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Analog Inputs                     | 8 (10-bit)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4 (16-bit)                                                 | 4 (16-bit)                                                 | 8 (16-bit)                                                          | 8(16-bit)                                                  | ---               | ---               |
| Analog Input Type                 | 0~10V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2*0/4~20mA<br>isolated<br>2*PT-100/1000<br>(-200~+600°C)   | 2*0/2~10V<br>2*PT-100/1000<br>(-200~+600°C)                | 0/4~20mA<br>isolated J,K,T,E<br>.R,S,B Thermistor<br>(-270~+1800°C) | 0/2~10V                                                    | ---               | ---               |
| Analog Outputs                    | 2(10-bit)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2(12-bit)                                                  | 2(12-bit)                                                  | ---                                                                 | ---                                                        | 6(12-bit)         | 8(12-bit)         |
| Analog Output Type                | 0~10V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0/4~20mA                                                   | 0/2~10V                                                    | ---                                                                 | ---                                                        | 0/4~20mA          | 0/2~10V           |
| Input Impedance                   | Voltage:10 MΩ                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Current:100Ω<br>RTD: 10MΩ                                  | Current:100Ω<br>RTD: 10MΩ                                  | Current:100Ω<br>Voltage: 10MΩ                                       | ---                                                        | ---               | ---               |
| Analog Input / Output Accuracy    | ±1%/±1%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ±0.1%/±1%                                                  | ±0.1%/±1%                                                  | ±0.1%/ ---                                                          | ±0.1%/ ---                                                 | ±0.1%/ ---        | ±0.1%/ ---        |
| Interface                         | RS-485(isolataed)                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RS-485(isolataed)<br>+USB                                  | RS-485+USB                                                 | RS-485(isolataed)<br>+USB                                           | RS-485+USB                                                 | RS-485(isolataed) | RS-485(isolataed) |
| Channel Independent Configuration | YES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Sampling Rate                     | 10 sample/second (total)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| CMR @ 50/60 Hz                    | 120 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Span Drift                        | ±50 ppm/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Zero Drift                        | ±18 μV/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                            |                                                            |                                                                     |                                                            |                   |                   |
| Temperature Ranges                | (PT-100:-200~600°C) (PT-1000:-200~600°C) (J:-210~760°C) (K:-270~1370°C) (T:-270~400°C) (E:-270~1000°C) (R:0~1750°C) (S:0~1750°C) (B:0~1800°C) (Thermistor-10K-T2:0~100°C) (Thermistor-10K-T3:0~100°C) (Thermistor-6.8K:-10~100°C) (Thermistor-4.7K:-10~100°C) (Thermistor-3.3K:-20~100°C) (Thermistor-3K:-20~100°C) (Thermistor-2.7K:-20~100°C) (Thermistor-2.252K:-20~100°C) (Thermistor-2.1K:-30~100°C) (Thermistor-2K:-30~100°C) (Thermistor-1.5K:-40~100°C) (Thermistor-1K:-40~100°C) |                                                            |                                                            |                                                                     |                                                            |                   |                   |

# Remote Modules

## RS-485 I/O Remote Modules

### A-1080 Lighting Relay Controller

#### OVERVIEW

- ※ Can Be Used In Building Lighting, Street Lighting, Hotel Lighting, To Measure Up Better Energy Control
- ※ N + 1 Wiring Lighting Output Control
- ※ Manual Control Switch At Each Point And Long Distance Remote Control From The Control Room
- ※ LED Status Indicator
- ※ Can Be Installed With DIN And Secured With Screw
- ※ The Module Can Use AC-24V To Supply Electricity To Reduce The Cost
- ※ Can Be Omitted Lighting Electrical Engineering Part Of The Secondary Circuit Transformation
- ※ Use For Yottacontrol Whole Series Controller
- ※ RS-485 Interface
- ※ Supports Modbus RTU / ASCII
- ※ Operation Temperature -20~+75°C
- ※ Isolation Voltage: 5000 V DC
- ※ Surge , EFT And ESD Protection
- ※ Dual Watchdog Timer
- ※ Low Power Indicator
- ※ Operation Range: Up To 1200 Meters
- ※ Free Monitor PC Software "Yotta Utility"



For More Information, Please Refer To

[www.yottacontrol.com](http://www.yottacontrol.com)

| Type                       | A-1080<br>(Lighting Relay Controller) |
|----------------------------|---------------------------------------|
| Operation Voltage          | 10~30VDC/24VAC                        |
| Outputs(Isolation)         | 8                                     |
| Communication Baud Rate    | 2400-921600bps                        |
| Isolation                  | Yes(5000VDC)                          |
| Output Operating Frequency | 10HZ                                  |
| Operation Temperature      | -20 to +75 °C                         |
| Degree Of Protection       | IP20                                  |
| Function Key               | 8                                     |
| Installation               | 35 mm DIN Rail or Flush Mounting      |
| Dimension (W x H x D mm)   | 76.4*118.2*39 mm                      |

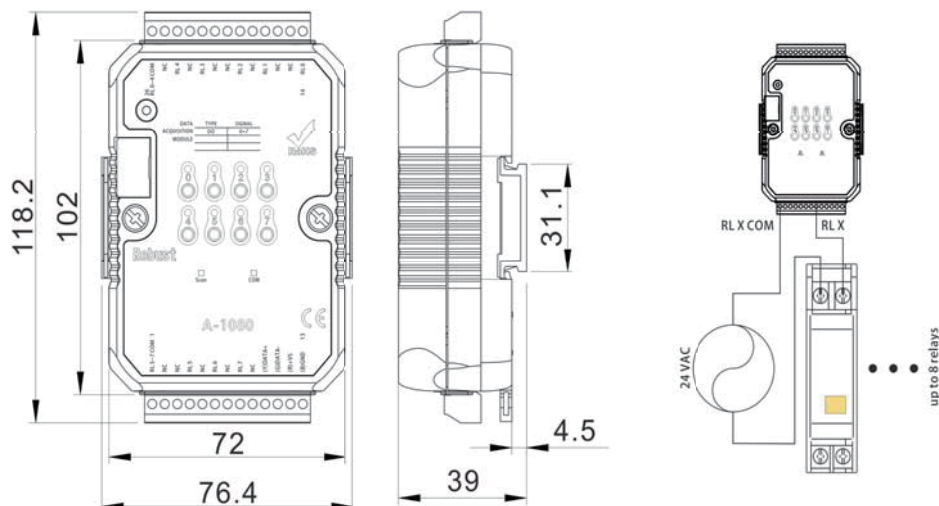
#### Address Mapping

**Supported Modbus Code: 01/02/05/15**

Address :00017~00024

0~7 Digital Output Value

#### Dimension & Wiring Diagrams



# Monitoring and Database Software

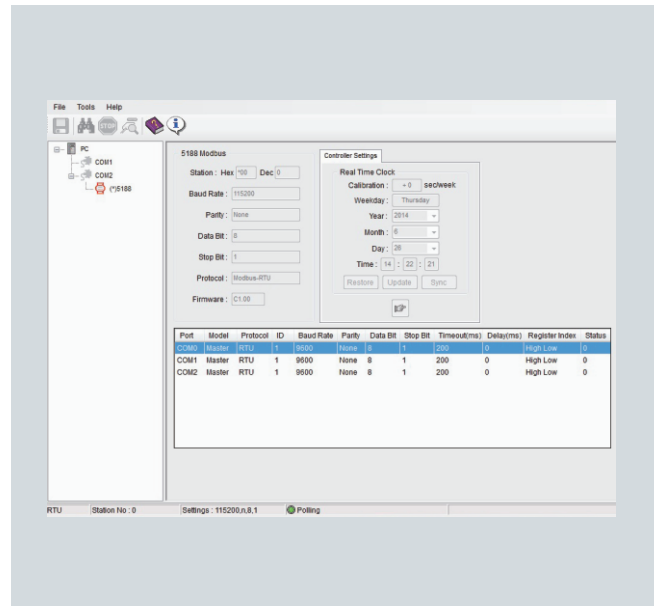
## DCS Monitoring and Database Software

### YottaUtility

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#### OVERVIEW

- ※ Monitor & Database Function
- ※ Use For Yottacontrol Whole Series Controller And TS-48 Time Switch
- ※ Windows98/ME/2000/XP/Vista/7/8/10
- ※ Quick Setup Distributed Device Parameter & Monitoring
- ※ Can Monitor DCS Program & Parameters
- ※ Can Monitor PLC Program & Parameters
- ※ Monitor & Database Can Use For SCADA
- ※ Real-Time Monitoring, Warning Setup
- ※ Monitor Hundreds Controllers & Distributed Devices
- ※ Component Name Comment
- ※ Easy Logical Program Function
- ※ Time Switch Series Edit
- ※ Multi Communicate Parameter Function
- ※ Support MODBUS TCP-IP/UDP-IP/RTU/ASCII
- ※ Quick Setup Controller RTC Parameter



For more information, please refer to

[www.yottacontrol.com](http://www.yottacontrol.com)

#### APPLICATIONS

##### ELECTRONIC EQUIPMENT

- SORTING MACHINE
- LOADER & UNLOADER
- PACKAGING MACHINE
- DETECTOR
- CUTTING MACHINE
- LAMINATOR
- COATING MACHINE
- LAPPING MACHINE
- FEEDING SYSTEM
- PRECISION MACHINERY

##### ELECTROMECHANICAL EQUIPMENT

- SPRAYING MACHINE
- EVAPORATION
- MACERATOR
- CALENDER MACHINE
- FLUSHING MACHINE
- ELECTROPLATING MACHINE
- WELDING MACHINE
- PRESS MACHINE
- CUTTING MACHINE
- BENDING MACHINE
- BOBBIN MACHINE
- BURN-IN EQUIPMENT
- DIE CASTER
- HEATING PROCESSING

##### FOOD & BEVERAGE

- PACKAGING MACHINE
- SEAL-CAPPING MACHINE
- LABELLING MACHINE
- FORMING MACHINE
- BLENDER EQUIPMENT
- CASING MACHINE
- FILLING MACHINE
- DRYER EQUIPMENT
- WEIGHT SEPARATOR
- CAPPING MACHINE
- INJECTION MACHINE
- TEMPERATURE-CONTROL

# Ordering Information

## Yottacontrol Remote Modules

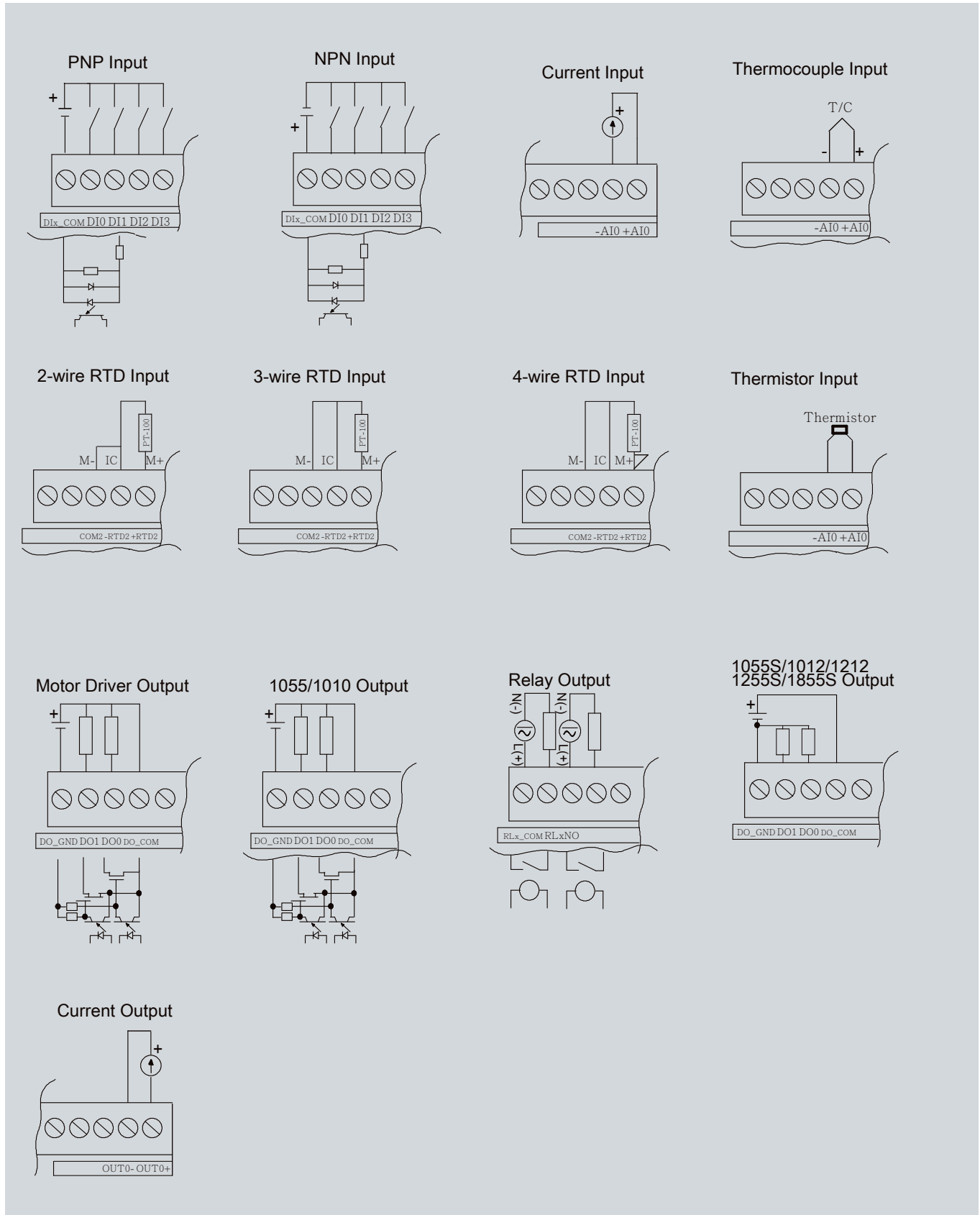
| WIFI Remote Modules                    |                                                                                                                                           |               |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1212                                   | WIFI ADIO Remote Modules,4AI(0~20/4~20mA + PT-100/1000),2AO(0~20/4~20mA),2DI,2DO(Source Output),WIFI*1,RS-485*1,USB*1                     | A-1212        |
| 1213                                   | WIFI ADIO Remote Modules,4AI(0/2~10V + PT-100/1000),2AO(0/2~10V),2DI,2DO(Source Output),WIFI*1,RS-485*1,USB                               | A-1213        |
| 1219                                   | WIFI ADIO Remote Modules,8AI(0~20/4~20mA,J,K,T,E,R,S,B,Thermistor),4DI,WIFI*1,RS-485*1,USB*1                                              | A-1219        |
| 1251                                   | WIFI DI Remote Modules,16DI,WIFI*1,RS-485*1,USB*1                                                                                         | A-1251        |
| 1255                                   | WIFI ADIO Remote Modules,8DI/4DO/4AI(0~10V),Motor Driver Output,WIFI*1,RS-485*1,USB*1                                                     | A-1255        |
| 1260                                   | WIFI ADIO Remote Modules,7DI/4DO/4AI(0~10V),Power Relay Output,WIFI*1,RS-485*1,USB*1                                                      | A-1260        |
| 1269                                   | WIFI ADIO Remote Modules,8DO/4AI(0~10V),Power Relay Output,WIFI*1,RS-485*1,USB*1                                                          | A-1269        |
| 1255S                                  | WIFI ADIO Remote Modules,8DI/4DO/4AI(0~10V),Source Output,WIFI*1,RS-485*1,USB*1                                                           | A-1255S       |
| ETHERNET Remote Modules                |                                                                                                                                           |               |
| 1812                                   | ETHERNET ADIO Remote Modules,4AI(0~20/4~20mA + PT-100/1000),2AO(0~20/4~20mA),2DI,ETHERNET*1,USB*1                                         | A-1812        |
| 1819                                   | ETHERNET ADIO Remote Modules,8AI(0~20/4~20mA,J,K,T,E,R,S,B,Thermistor),ETHERNET*1,USB*1                                                   | A-1819        |
| 1851                                   | ETHERNET DI Remote Modules,16DI,ETHERNET*1,USB*1                                                                                          | A-1851        |
| 1855                                   | ETHERNET DIO Remote Modules,8DI/4DO,Motor Driver Output,ETHERNET*1,USB*1                                                                  | A-1855        |
| 1860                                   | ETHERNET DIO Remote Modules,8DI/4DO,Power Relay Output,ETHERNET*1,USB*1                                                                   | A-1860        |
| 1869                                   | ETHERNET DIO Remote Modules,8DO,Power Relay Output,ETHERNET*1,USB*1                                                                       | A-1869        |
| 1855S                                  | ETHERNET DIO Remote Modules,8DI/4DO,Source Driver Output,ETHERNET*1,USB*1                                                                 | A-1855S       |
| RS-485 Remote Modules                  |                                                                                                                                           |               |
| 1057                                   | DO Remote Modules , LED indicator , DC Power Supply , 12DO , Source Output , RS-485*1                                                     | A-1057        |
| 1058                                   | DO Remote Modules , LED indicator , DC Power Supply , 12DO , Sink Output , RS-485*1                                                       | A-1058        |
| 1068                                   | DO Remote Modules , LED indicator , DC Power Supply , 8DO , Signal Relay Output , RS-485*1                                                | A-1068        |
| 1069                                   | DO Remote Modules , LED indicator , DC Power Supply , 8DO , Power Relay Output , RS-485*1                                                 | A-1069        |
| 1051+                                  | DI Remote Modules , LED indicator , DC Power Supply , 16DI , RS-485*1(isolated)                                                           | A-1051+       |
| 1051                                   | DI Remote Modules , LED indicator , DC Power Supply , 16DI , RS-485*1                                                                     | A-1051        |
| 1055                                   | DIO Remote Modules , LED indicator , DC Power Supply , 8DI/8DO , Sink Output , RS-485*1                                                   | A-1055        |
| 1055S                                  | DIO Remote Modules , LED indicator , DC Power Supply , 8DI/8DO , Source Output , RS-485*1                                                 | A-1055S       |
| 1060                                   | DIO Remote Modules , LED indicator , DC Power Supply , 8DI/4DO , Power Relay Output , RS-485*1                                            | A-1060        |
| 1010+                                  | ADIO Remote Modules , LED indicator , DC Power Supply , 8AI(0~10V) , 2AO(0~10V) , 4DO(Sink Output) , RS-485*1(isolated)                   | A-1010+       |
| 1010                                   | ADIO Remote Modules , LED indicator , DC Power Supply , 8AI(0~10V) , 2AO(0~10V) , 4DO(Sink Output) , RS-485*1                             | A-1010        |
| 1012+                                  | ADIO Remote Modules , LED indicator , DC Power Supply , 4AI(0/4~20mA+PT100/1000) , 2AO(0/4~20mA) , 2DI , 2DO(source) , RS-485*1(isolated) | A-1012+       |
| 1012                                   | ADIO Remote Modules , LED indicator , DC Power Supply , 4AI(0/4~20mA+PT100/1000) , 2AO(0/4~20mA) , 2DI , 2DO(source) , RS-485*1,USB*1     | A-1012        |
| 1013                                   | ADIO Remote Modules , LED indicator , DC Power Supply , 4AI(0/2~10V+PT100/1000) , 2AO(0/2~10V) , 2DI , 2DO(source) , RS-485*1,USB*1       | A-1013        |
| 1019+                                  | ADIO Remote Modules , LED indicator , DC Power Supply , 8AI(0~20/4~20mA,J,K,T,E,R,S,B,Thermistor) , 4DI , RS-485*1(isolated)              | A-1019+       |
| 1019                                   | ADIO Remote Modules , LED indicator , DC Power Supply , 8AI(0~20/4~20mA,J,K,T,E,R,S,B,Thermistor) , 4DI , RS-485*1,USB*1                  | A-1019        |
| 1020                                   | ADIO Remote Modules , LED indicator , DC Power Supply , 8AI(0~10V)-16bits , 4DI , RS-485*1 , USB*1                                        | A-1020        |
| 1036+                                  | AO Remote Modules , LED indicator , DC Power Supply , 6AO(0/4~20mA) , RS-485*1(isolated)                                                  | A-1036+       |
| 1038+                                  | AO Remote Modules , LED indicator , DC Power Supply , 8AO(0/2~10V) , RS-485*1(isolated)                                                   | A-1038+       |
| 1080                                   | DO Remote Modules , LED indicator , DC/AC Power Supply , 8DO , HID Relay Output , Input Switch*8 , RS-485*1                               | A-1080        |
| Wi-Fi Two-Way Communicate Transmitters |                                                                                                                                           |               |
| A-3290                                 | WIFI DI Remote Modules,7DI,WIFI*1,USB*1                                                                                                   | A-3290        |
| Accessories                            |                                                                                                                                           |               |
| ASPS                                   | Power Supply , 24V/2A                                                                                                                     | ASPS          |
| CAB-MINIUSB60                          | Communication lines                                                                                                                       | CAB-MINIUSB60 |
| CAB89                                  | A-3290 Communication lines                                                                                                                | CAB89         |
| Software                               |                                                                                                                                           |               |
| YottaUtility                           | Monitoring and Database Software                                                                                                          | YottaUtility  |
| A-1x USB Driver                        | A-1x USB PC Driver                                                                                                                        | DR-A1XUSB     |
| CAB89 USB Driver                       | A-3290 Communication lines PC Driver                                                                                                      | DR-CAB89USB   |

# Wiring Diagrams & Pin Out

## Remote Modules

### A-1x Series

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For more information, please refer to  
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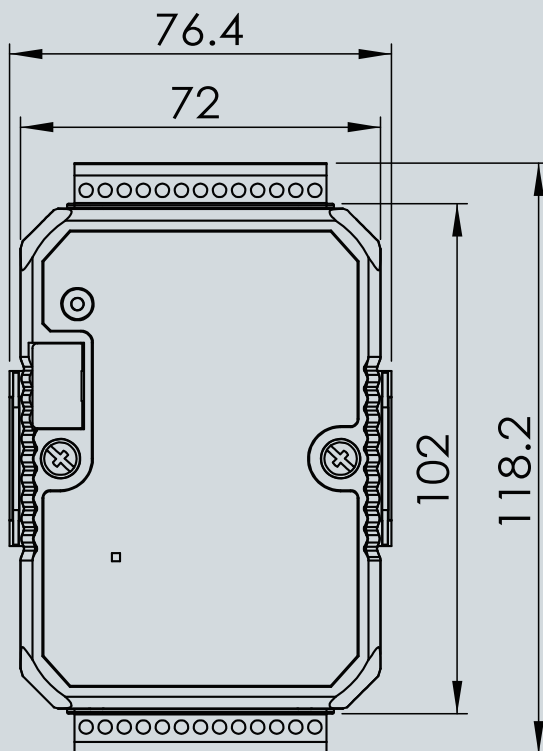
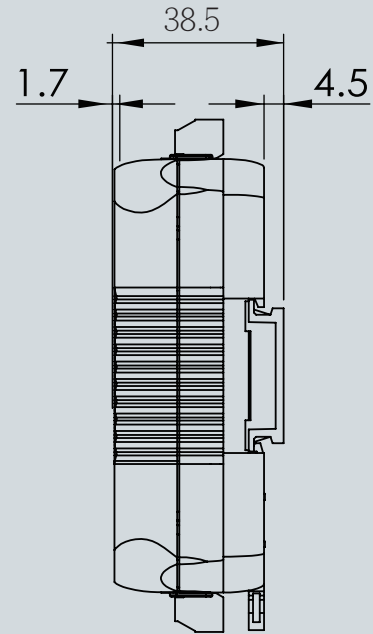
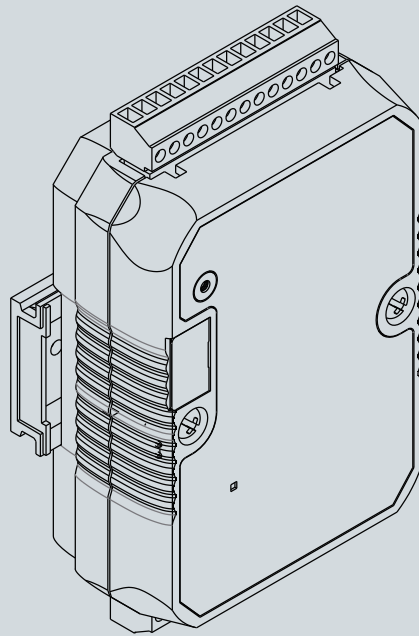


## Dimension

### Remote Modules

### Remote Modules

#### Dimension



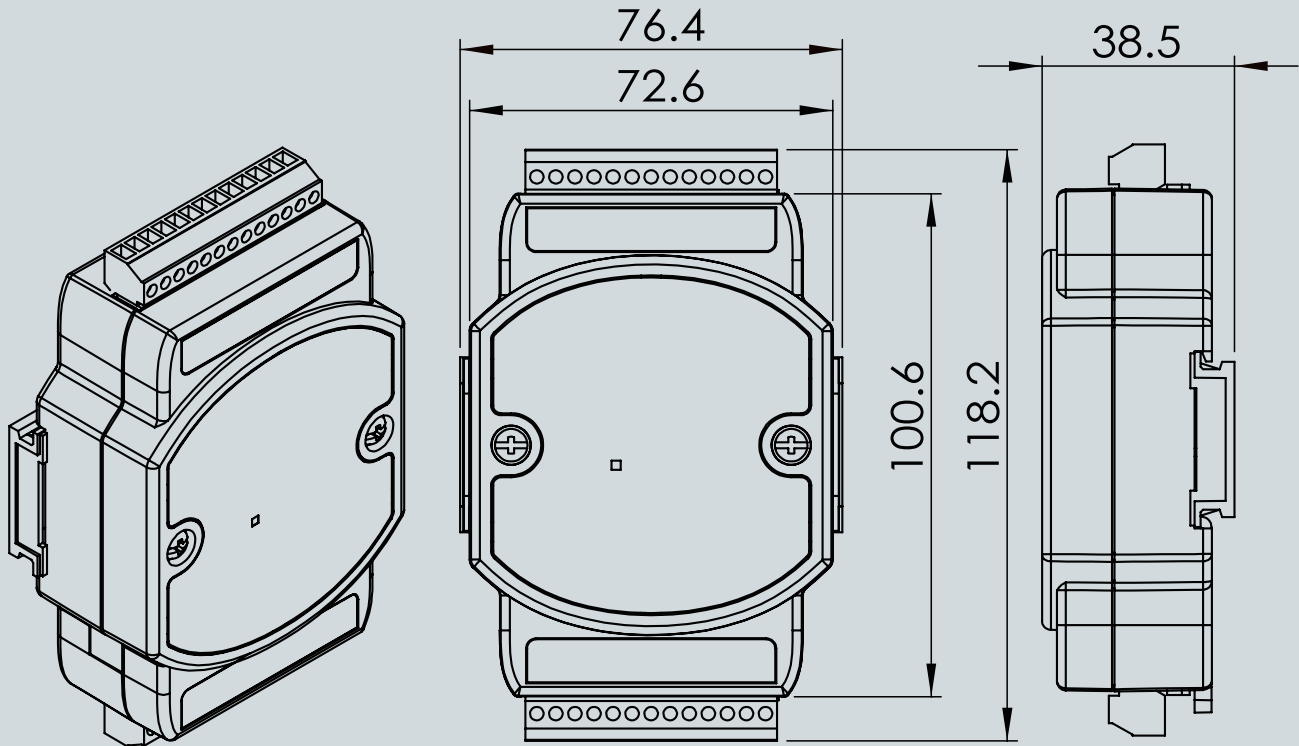
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## Dimension

### Remote Modules

### Remote Modules

#### Dimension



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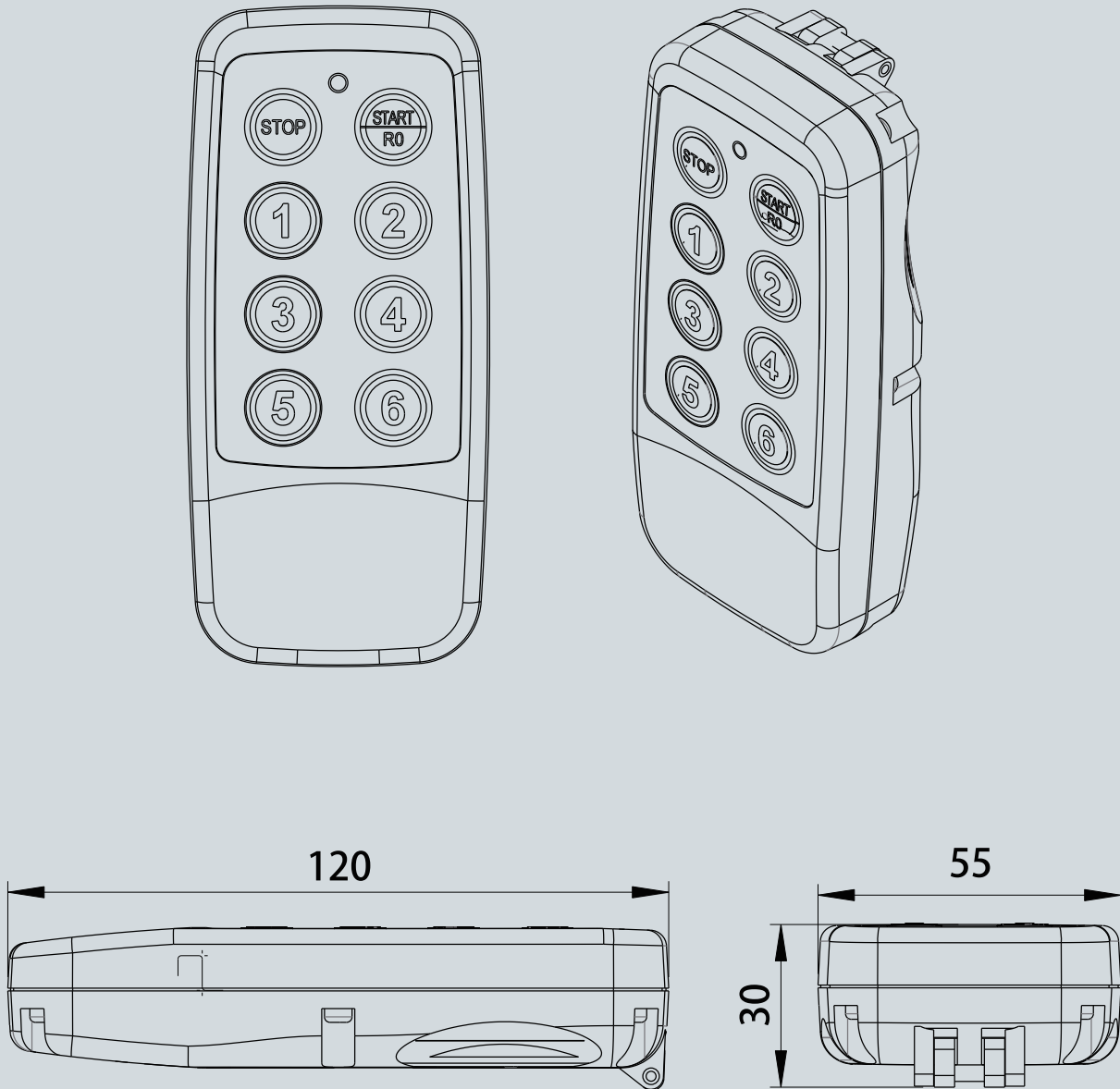
## Dimension

### Remote Modules

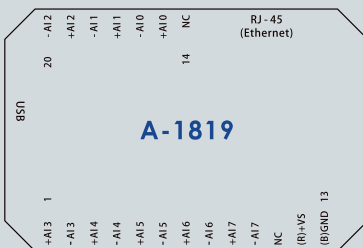
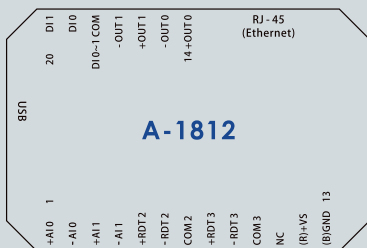
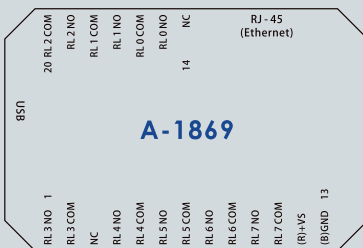
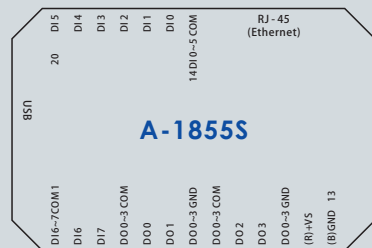
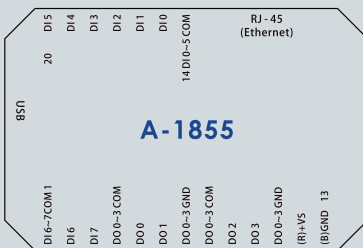
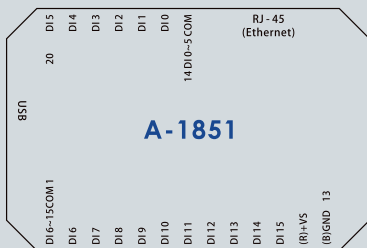
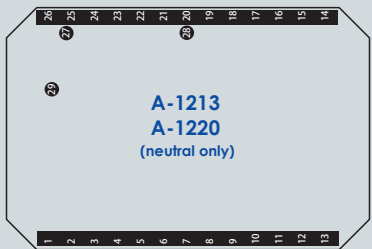
## Remote Modules

#### Dimension

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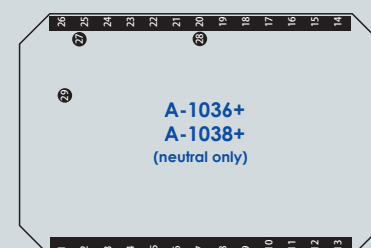
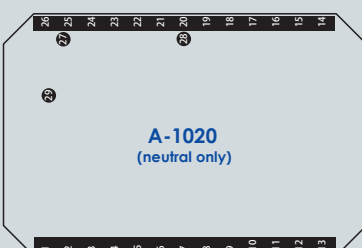
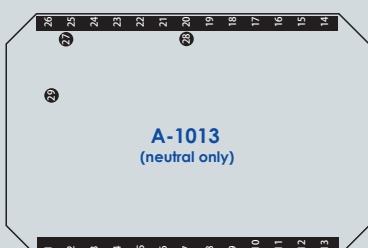
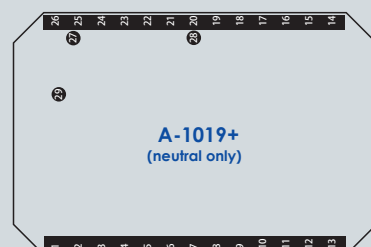
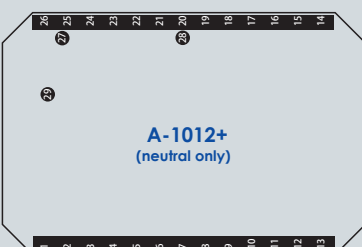
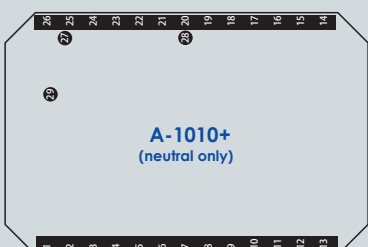
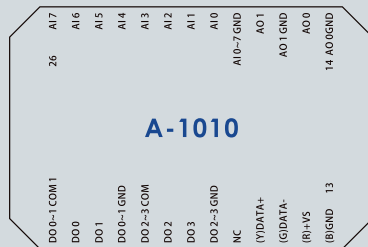
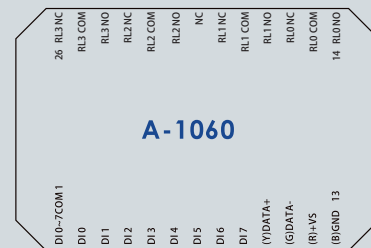
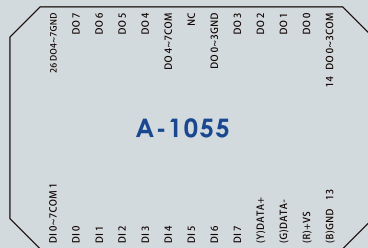
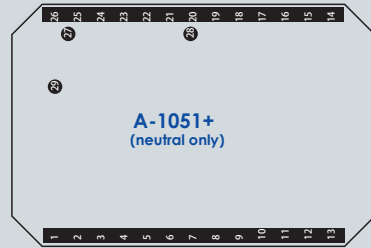
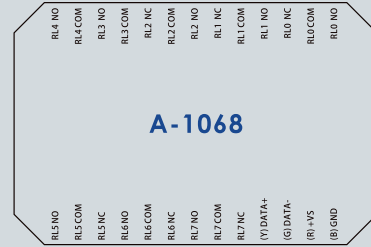
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# Pin Assignments

## Remote Modules

## Remote Modules

Pin Table



For more information, please refer to  
[www.yottacontrol.com](http://www.yottacontrol.com)

# Address Mapping

## Remote Modules

## Remote Modules

Mapping Table

|                        |                                                 |     |       |                                                               |
|------------------------|-------------------------------------------------|-----|-------|---------------------------------------------------------------|
| A-1212                 |                                                 |     |       |                                                               |
| Supported Modbus Code: | 01/02/05/15                                     |     |       |                                                               |
| Address 0X             | Item                                            | NOR | INIT* | NOTE                                                          |
| 00001-00002            | 0-1 DI Input Signal                             | R   | R     |                                                               |
| 00017-00018            | 0-1 DO Output Value                             | R/W | R/W   |                                                               |
| 00033-00034            | 0-1 Power On Digital Output Value               | R   | R/W   |                                                               |
| 00049-00050            | 0-1 Communication Fail Safe Value               | R   | R/W   |                                                               |
| 00065-00066            | 0-1 Burn-out Signal                             | R   | R     | 1:Burn-out (4-20mA only)                                      |
| 00067-00068            | 2-3 Burn-out Signal                             | R   | R     | 1:Burn-out                                                    |
| 00129-01152            | 0-1023 Auxiliary Memory (M Flag)                | R/W | R/W   |                                                               |
| Supported Modbus Code: | 03/04/06/16                                     |     |       |                                                               |
| Address 4X             | Item                                            | NOR | INIT* | NOTE                                                          |
| 40001-40002            | 0-1 Current Input Value                         | R   | R     | 0-20000:0/4-20mA                                              |
| 40003-40004            | 2-3 Current Input Value                         | R   | R     | 0-8000:-200~+600° C                                           |
| 40017-40018            | 0-1 Current Output Value                        | R/W | R/W   | 0-4000:0/4-20mA                                               |
| 40033-40034            | Power On Analog Output Value                    | R   | R/W   | 0-4000:0/4-20mA                                               |
| 40049-40050            | 0-1 Communication Fail Safe Analog Output Value | R   | R/W   | 0-4000:0/4-20mA                                               |
| 40065-40066            | 0-1 Input Type Code                             | R   | R/W   | 0:4-20mA 1:0-20mA                                             |
| 40067-40068            | 2-3 Input Type Code                             | R   | R/W   | 0:PT-100α=0.00385                                             |
|                        |                                                 |     |       | 1:PT-100α=0.003916                                            |
|                        |                                                 |     |       | 2:PT-1000α=0.00385                                            |
|                        |                                                 |     |       | 3:PT-1000α=0.003916                                           |
| 40081-40082            | 0-1 Output Type Code                            | R   | R/W   | 0:4-20mA 1:0-20mA                                             |
| 40097-40098            | 0-1 Current Input Value                         | R   | R     | 4/0-20:4/0-20mA                                               |
| 40099-40100            | 2-3 Current Input Value                         | R   | R     | -200~+600:-200~+600° C                                        |
| 40113-40114            | 0-1 Current Input Value                         | R   | R     | 4/0-20:4/0-20mA                                               |
| 40115-40116            | 2-3 Current Input Value                         | R   | R     | -328~+1112:-328~+1112° F                                      |
| 40129-40130            | 0-1 Current Input Value                         | R   | R     | 40/0-200:4.0/0-20.0mA                                         |
| 40131-40132            | 2-3 Current Input Value                         | R   | R     | -2000~+6000:-200.0~+600.0° C                                  |
| 40145-40146            | 0-1 Current Input Value                         | R   | R     | 40/0-200:4.0/0-20.0mA                                         |
| 40147-40148            | 2-3 Current Input Value                         | R   | R     | -3280~+11120:-328.0~+1112.0° F                                |
| 40161-40164            | 0-3 Current Input Value                         | R   | R     | 0-10000:0.00-100.00% of FSR                                   |
| 40177                  | Communication Fail Safe Time Setting Value      | R   | R/W   | 0-65535:Disable-65535msec                                     |
| 40178                  | All DI Value                                    | R   | R     |                                                               |
| 40211                  | Module Name 1                                   | R   | R     | 0x12 0x12                                                     |
| 40212                  | Module Name 2                                   | R   | R     |                                                               |
| 40213                  | Version 1                                       | R   | R     | 0x01 0x12                                                     |
| 40214                  | Version 2                                       | R   | R     |                                                               |
| 40215-40220            | 1-6 Mac Serial Number                           | R   | R     |                                                               |
| 40300                  | Module's ID In Normal Mode                      | R   | R/W   | 1-255                                                         |
| 40301                  | Protocol In Normal Mode                         | R   | R/W   | 0: RTU 1: ASCII                                               |
| 40302                  | Baud Rate In Normal Mode                        | R   | R/W   | 1: 2400 bps 2: 4800 bps 3: 9600 bps 4: 14400 bps 5: 19200 bps |
|                        |                                                 |     |       | 6: 28800 bps 7: 38400 bps 8: 57600 bps 9: 115200 bps          |
|                        |                                                 |     |       | 10: 230400 bps 11: 460800 bps 12: 921600 bps                  |
| 40303                  | Parity Option In Normal Mode                    |     |       | 0: None 1: Odd 2: Even                                        |
| 40304                  | Stop Bits In Normal Mode                        | R   | R/W   | 0: 1 bit 1: 2 bit                                             |
| 40305                  | Time Out Setting In Normal Mode                 | R   | R/W   | 0-65535 msec                                                  |
| 40609-40616            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754)(Float CD AB)                  |
| 40641-40648            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754)(Float CD AB)            |
| 40673-40680            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754)(Float CD AB)            |
| 40705-40712            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754)(Float AB CD)                  |
| 40737-40744            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754)(Float AB CD)            |
| 40769-40776            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754)(Float AB CD)            |
| 40801-40808            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754)(Float BA DC)                  |
| 40833-40840            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754)(Float BA DC)            |
| 40865-40872            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754)(Float BA DC)            |
| 40897-40904            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754)(Float DC BA)                  |
| 40929-40936            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754)(Float DC BA)            |
| 40961-40968            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754)(Float DC BA)            |
| 41281-41408            | 0-127 Analog Auxiliary Memory (AM Flag)         | R/W | R/W   | 0-65535                                                       |
| 40401                  | WIFI Mode                                       | R   | R/W   | 0:AP(default) 1:Remote                                        |
| 40402                  | WIFI Encryption (WPA2)                          | R   | R/W   | 0:DISABLE(default) 1:ENABLE                                   |
| 40403-40434            | WIFI SSID                                       | R   | R/W   | Default : 12WIFI                                              |
| 40435-40498            | WIFI Password                                   | R   | R/W   | Default : 88888888                                            |
| 40499                  | WIFI Channel                                    | R   | R/W   | 0~13 0: Auto(default) / 1~13CH                                |
| 40500-40503            | WIFI IP                                         | R   | R/W   | IP:x.x.x.x default : 192.168.1.1                              |
| 40504-40507            | WIFI MASK                                       | R   | R/W   | MASK: x.x.x.x default:255.255.255.0                           |
| 40508-40511            | WIFI GATEWAY                                    | R   | R/W   | GATEWAY: x.x.x.x Default:192.168.1.1                          |
| 40512                  | WIFI MODBUS ID                                  | R   | R/W   | INIT*: 0. NOR:1-255                                           |
| 40513                  | WIFI LOCAL PORT                                 | R   | R/W   | 1-65535 Default :502                                          |
| 40514                  | WIFI REMOTE PORT                                | R   | R/W   | 1-65535 Default:2000                                          |
| 40515                  | WIFI DHCP Enable                                | R   | R/W   | 0:ENABLE(default) 1:DISABLE                                   |
| 40516                  | WIFI PROTOCOL                                   | R   | R/W   | 0:Modbus TCP/IP(default)                                      |
|                        |                                                 |     |       | 1:Modbus UDP/IP                                               |
|                        |                                                 |     |       | 2:Modbus RTU Over TCP/IP                                      |
|                        |                                                 |     |       | 3:Modbus RTU Over UDP/IP                                      |
| 40517                  | WIFI TX POWER                                   | R   | R/W   | 0: Auto(default) step:1-12                                    |
| 40518-40523            | MAC ADDRESS                                     | R   | R     | EX: 00-05-5D-E8-0F-A3                                         |
|                        |                                                 |     |       |                                                               |
|                        |                                                 |     |       |                                                               |
|                        |                                                 |     |       |                                                               |
|                        |                                                 |     |       |                                                               |

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## Address Mapping

## Remote Modules

## Remote Modules

Mapping Table

|                        |                                                 |     |       |                                                                                                                                                           |
|------------------------|-------------------------------------------------|-----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| A-1213                 |                                                 |     |       |                                                                                                                                                           |
| Supported Modbus Code: | 01/02/05/15                                     |     |       |                                                                                                                                                           |
| Address 0X             | Item                                            | NOR | INIT* | NOTE                                                                                                                                                      |
| 00001-00002            | 0-1 DI Input Signal                             | R   | R     |                                                                                                                                                           |
| 00017-00018            | 0-1 DO Output Value                             | R/W | R/W   |                                                                                                                                                           |
| 00033-00034            | 0-1 Power On Digital Output Value               | R   | R/W   |                                                                                                                                                           |
| 00049-00050            | 0-1 Communication Fail Safe Value               | R   | R/W   |                                                                                                                                                           |
| 00065-00066            | 0-1 Burn-out Signal                             | R   | R     | 1:Burn-out (2-10V only)                                                                                                                                   |
| 00067-00068            | 2-3 Burn-out Signal                             | R   | R     | 1:Burn-out                                                                                                                                                |
| 00129-01152            | 0-1023 Auxiliary Memory (M Flag)                | R/W | R/W   |                                                                                                                                                           |
| Supported Modbus Code: | 03/04/06/16                                     |     |       |                                                                                                                                                           |
| Address 4X             | Item                                            | NOR | INIT* | NOTE                                                                                                                                                      |
| 40001-40002            | 0-1 Current Input Value                         | R   | R     | 0-10000:0/2-10V                                                                                                                                           |
| 40033-40034            | 2-3 Current Input Value                         | R   | R     | 0-8000:-200~+600° C                                                                                                                                       |
| 40017-40018            | 0-1 Current Output Value                        | R/W | R/W   | 0-4000:0/2-10V                                                                                                                                            |
| 40065-40066            | Power On Analog Output Value                    | R   | R/W   | 0-4000:0/2-10V                                                                                                                                            |
| 40067-40068            | 0-1 Communication Fail Safe Analog Output Value | R   | R/W   | 0-4000:0/2-10V                                                                                                                                            |
| 40065-40066            | 0-1 Input Type Code                             | R   | R/W   | 0:2-10V 1:0-10V                                                                                                                                           |
| 40067-40068            | 2-3 Input Type Code                             | R   | R/W   | 0:PT-100 $\alpha=0.00385$ 1:PT-100 $\alpha=0.003916$<br>2:PT-1000 $\alpha=0.00385$ 3:PT-1000 $\alpha=0.003916$                                            |
| 40081-40082            | 0-1 Output Type Code                            | R   | R/W   | 0:2-10V 1:0-10V                                                                                                                                           |
| 40097-40098            | 0-1 Current Input Value                         | R   | R     | 0-10:0/2-10V                                                                                                                                              |
| 40099-40100            | 2-3 Current Input Value                         | R   | R     | -200~+600:-200~+600° C                                                                                                                                    |
| 40113-40114            | 0-1 Current Input Value                         | R   | R     | 0-10:0/2-10V                                                                                                                                              |
| 40115-40116            | 2-3 Current Input Value                         | R   | R     | -328~+1112:-328~+1112° F                                                                                                                                  |
| 40129-40130            | 0-1 Current Input Value                         | R   | R     | 0-100:0/2-10V                                                                                                                                             |
| 40131-40132            | 2-3 Current Input Value                         | R   | R     | -2000~+6000:-200.0~+600.0° C                                                                                                                              |
| 40145-40146            | 0-1 Current Input Value                         | R   | R     | 0-100:0/2-10V                                                                                                                                             |
| 40147-40148            | 2-3 Current Input Value                         | R   | R     | -3280~+11120:-328.0~+1112.0° F                                                                                                                            |
| 40161-40164            | 0-3 Current Input Value                         | R   | R     | 0-10000:0.00-100.00% ofFSR                                                                                                                                |
| 40177                  | Communication Fail Safe Time Setting Value      | R   | R/W   | 0-65535:Disable-65535msec                                                                                                                                 |
| 40178                  | All DI Value                                    | R   | R     |                                                                                                                                                           |
| 40211                  | Module Name 1                                   | R   | R     | 0x10 0x13                                                                                                                                                 |
| 40212                  | Module Name 2                                   | R   | R     |                                                                                                                                                           |
| 40213                  | Version 1                                       | R   | R     | 0x10 0x13                                                                                                                                                 |
| 40214                  | Version 2                                       | R   | R     |                                                                                                                                                           |
| 40215-40220            | 1-6 Mac Serial Number                           | R   | R     |                                                                                                                                                           |
| 40300                  | Module's ID In Normal Mode                      | R   | R/W   | 1~255                                                                                                                                                     |
| 40301                  | Protocol In Normal Mode                         | R   | R/W   | 0:RTU 1:ASCII                                                                                                                                             |
| 40302                  | Baud Rate In Normal Mode                        | R   | R/W   | 1:2400 bps 2:4800 bps 3:9600 bps 4:14400 bps 5:19200 bps<br>6:28800 bps 7:38400 bps 8:57600 bps 9:115200 bps<br>10:230400 bps 11:460800 bps 12:921600 bps |
| 40303                  | Parity Option In Normal Mode                    |     |       | 0:None 1:Odd 2:Even                                                                                                                                       |
| 40304                  | Stop Bits In Normal Mode                        | R   | R/W   | 0:1 bit 1:2 bit                                                                                                                                           |
| 40305                  | Time Out Setting In Normal Mode                 | R   | R/W   | 0-65535 msec                                                                                                                                              |
| 40609-40616            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754) (Float CD AB)                                                                                                             |
| 40641-40648            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float CD AB)                                                                                                       |
| 40673-40680            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float CD AB)                                                                                                       |
| 40705-40712            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754) (Float AB CD)                                                                                                             |
| 40737-40744            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float AB CD)                                                                                                       |
| 40769-40776            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float AB CD)                                                                                                       |
| 40801-40808            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754) (Float BA DC)                                                                                                             |
| 40833-40840            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float BA DC)                                                                                                       |
| 40865-40872            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float BA DC)                                                                                                       |
| 40897-40904            | 0-3 Current Input Value                         | R   | R     | 32-bit Floating Value (IEEE754) (Float DC BA)                                                                                                             |
| 40929-40936            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float DC BA)                                                                                                       |
| 40961-40968            | 0-3 Current Input Value                         | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float DC BA)                                                                                                       |
| 41281-41408            | 0-127 Analog Auxiliary Memory (AM Flag)         | R/W | R/W   | 0-65535                                                                                                                                                   |
| 40401                  | WIFI Mode                                       | R   | R/W   | 0:AP(default) 1:Remote                                                                                                                                    |
| 40402                  | WIFI Encryption (WPA2)                          | R   | R/W   | 0:DISABLE(default) 1:ENABLE                                                                                                                               |
| 40403-40434            | WIFI SSID                                       | R   | R/W   | Default: 12WIFI                                                                                                                                           |
| 40435-40498            | WIFI Password                                   | R   | R/W   | Default: 88888888                                                                                                                                         |
| 40499                  | WIFI Channel                                    | R   | R/W   | 0-13 0: Auto(default) / 1-13CH                                                                                                                            |
| 40500-40503            | WIFI IP                                         | R   | R/W   | IP:x.x.x.x default: 192.168.1.1                                                                                                                           |
| 40504-40507            | WIFI MASK                                       | R   | R/W   | MASK:x.x.x.x default: 255.255.255.0                                                                                                                       |
| 40508-40511            | WIFI GATEWAY                                    | R   | R/W   | GATEWAY: x.x.x.x Default: 192.168.1.1                                                                                                                     |
| 40512                  | WIFI MODBUS ID                                  | R   | R/W   | INIT*: 0 NOR: 1-255                                                                                                                                       |
| 40513                  | WIFI LOCAL PORT                                 | R   | R/W   | 1-65535 Default: 502                                                                                                                                      |
| 40514                  | WIFI REMOTE PORT                                | R   | R/W   | 1-65535 Default: 2000                                                                                                                                     |
| 40515                  | WIFI DHCP Enable                                | R   | R/W   | 0:ENABLE(default) 1:DISABLE                                                                                                                               |
| 40516                  | WIFI PROTOCOL                                   | R   | R/W   | 0:Modbus TCP/IP(default)<br>1:Modbus UDP/IP<br>2:Modbus RTU Over TCP/IP<br>3:Modbus RTU Over UDP/IP                                                       |
| 40517                  | WIFI TX POWER                                   | R   | R/W   | 0: Auto(default) step: 1-12                                                                                                                               |
| 40518-40523            | MAC ADDRESS                                     | R   | R     | EX: 00-05-5D-E8-0F-A3                                                                                                                                     |

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# Address Mapping

## Remote Modules

## Remote Modules

Mapping Table

|                        |                                                          |     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------|----------------------------------------------------------|-----|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A-1219                 |                                                          |     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Supported Modbus Code: | 01/02/05/15                                              |     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Address 0X             | Item                                                     | NOR | INIT* | NOTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 00001-00004            | 0-3 DI Input Signal                                      | R   | R     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 00065-00072            | 0-7 Burn-out Signal                                      | R   | R     | 1: Burn-out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 00129-01152            | 0-1023 Auxiliary Memory (M Flag)                         | R/W | R/W   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Supported Modbus Code: | 03/04/06/16                                              |     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Address 4X             | Item                                                     | NOR | INIT* | NOTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 40001-40008            | 0-7 Current Input Value                                  | R   | R     | 0-20000: 0-20mA/4-20mA 0-20700: -270~+1800° C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 40065-40072            | 0-7 Input Type Code                                      | R   | R/W   | 0: 4-20mA 1: 0-20mA 2: J(-210~760° C) 3: K(-270~1,370° C) 4: T(-270~400° C) 5: E(-270~1,000° C) 6: R(0~1,750° C) 7: S(0~1,750° C) 8: B(0~1,800° C) 9: 10K-2 Thermistor(0~+100° C) 10: 10K-3 Thermistor(0~+100° C) 11: 6.8K Thermistor(-10~+100° C) 12: 4.7K Thermistor(-10~+100° C) 13: 3.3K Thermistor(-20~+100° C) 14: 3K Thermistor(-20~+100° C) 15: 2.7K Thermistor(-20~+100° C) 16: 2.25K Thermistor(-20~+100° C) 17: 2.1K Thermistor(-30~+100° C) 18: 2K Thermistor(-30~+100° C) 19: 1.5K Thermistor(-40~+100° C) 20: 1K Thermistor(-40~+100° C) |
| 40097-40104            | 0-7 Current Input Value                                  | R   | R     | 4/0-20: 4/0-20mA -270~+1800: -270~+1800° C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 40113-40120            | 0-7 Current Input Value                                  | R   | R     | 4/0-20: 4/0-20mA -168~+3272: -168~+3272° F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 40129-40136            | 0-7 Current Input Value                                  | R   | R     | 40/0-200: 4.0/0-20.0mA -2700~+18000: -270.0~+1800.0° C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 40145-40152            | 0-7 Current Input Value                                  | R   | R     | 40/0-200: 4.0/0-20.0mA -1680~+32720: -168.0~+3272.0° F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 40161-40168            | 0-7 Current Input Value                                  | R   | R     | 0-10000: 0.00-100.00% of FSR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 40178                  | All DI Value                                             | R   | R     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 40211                  | Module Name 1                                            | R   | R     | 0x12 0x19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 40212                  | Module Name 2                                            | R   | R     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 40213                  | Version 1                                                | R   | R     | 0x01 0x12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 40214                  | Version 2                                                | R   | R     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 40215-40220            | 1-6 Mac Serial Number                                    | R   | R     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 40300                  | Module's ID In Normal Mode                               | R   | R/W   | 1-255                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 40301                  | Protocol In Normal Mode                                  | R   | R/W   | 0: RTU 1: ASCII                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 40302                  | Baud Rate In Normal Mode                                 | R   | R/W   | 1: 2400 bps 2: 4800 bps 3: 9600 bps 4: 14400 bps 5: 19200 bps 6: 28800 bps 7: 38400 bps 8: 57600 bps 9: 115200 bps 10: 230400 bps 11: 460800 bps 12: 921600 bps                                                                                                                                                                                                                                                                                                                                                                                        |
| 40303                  | Parity Option In Normal Mode                             | R   | R/W   | 0: None 1: Odd 2: Even                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 40304                  | Stop Bits In Normal Mode                                 | R   | R/W   | 0: 1 bit 1: 2 bit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 40305                  | Time Out Setting In Normal Mode                          | R   | R/W   | 0-65535 msec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 40609-40624            | 0-7 Current Input Value                                  | R   | R     | 32-bit Floating Value (IEEE754) (Float CD AB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 40641-40656            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float CD AB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40673-40688            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float CD AB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40705-40720            | 0-7 Current Input Value                                  | R   | R     | 32-bit Floating Value (IEEE754) (Float AB CD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 40737-40752            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float AB CD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40769-40784            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float AB CD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40801-40816            | 0-7 Current Input Value                                  | R   | R     | 32-bit Floating Value (IEEE754) (Float BA DC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 40833-40848            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float BA DC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40865-40880            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float BA DC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40897-40912            | 0-7 Current Input Value                                  | R   | R     | 32-bit Floating Value (IEEE754) (Float DC BA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 40929-40944            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.C Floating Value (IEEE754) (Float DC BA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40961-40976            | 0-7 Current Input Value                                  | R   | R     | 32-bit Deg.F Floating Value (IEEE754) (Float DC BA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 41281-41408            | 0-127 Analog Auxiliary Memory (AM Flag)                  | R/W | R/W   | 0-65535                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 40401                  | WiFi Mode                                                | R   | R/W   | 0: AP(default) 1: Remote                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 40402                  | WiFi Encryption (WPA2)                                   | R   | R/W   | 0: DISABLE(default) 1: ENABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 40403-40434            | WiFi SSID                                                | R   | R/W   | Default: 12WiFi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 40435-40498            | WiFi Password                                            | R   | R/W   | Default: 88888888                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 40499                  | WiFi Channel                                             | R   | R/W   | 0-13 0: auto(default) / 1-13CH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 40500-40503            | WiFi IP                                                  | R   | R/W   | IP: x.x.x.x default: 192.168.1.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 40504-40507            | WiFi MASK                                                | R   | R/W   | MASK: x.x.x.x default: 255.255.255.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 40508-40511            | WiFi GATEWAY                                             | R   | R/W   | GATEWAY: x.x.x.x Default: 192.168.1.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 40512                  | WiFi MODBUS ID                                           | R   | R/W   | INIT*: 0_NOR: 1-255                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40513                  | WiFi LOCAL PORT                                          | R   | R/W   | 1-65535 Default: 502                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 40514                  | WiFi REMOTE PORT                                         | R   | R/W   | 1-65535 Default: 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 40515                  | WiFi DHCP Enable                                         | R   | R/W   | 0: ENABLE(default) 1: DISABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 40516                  | WiFi PROTOCOL                                            | R   | R/W   | 0: Modbus TCP/IP(default) 1: Modbus UDP/IP 2: Modbus RTU Over TCP/IP 3: Modbus RTU Over UDP/IP                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 40517                  | WiFi TX POWER                                            | R   | R/W   | 0: Auto(default) step: 1~12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 40518-40523            | MAC ADDRESS                                              | R   | R     | EX: 00-05-5D-E8-0F-A3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 40222                  | CJC Value                                                | R   | R     | -32767 ~ +32767: -327.67 ~ +327.67 Deg.C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 40225                  | Set CJC Offset Value                                     | R   | R/W   | -32767 ~ +32767: -327.67 ~ +327.67 Deg.C Default: 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 40226-40233            | Set The AI0-7 Offset Value (For Thermocouple/Thermistor) | R   | R/W   | -32767 ~ +32767: -327.67 ~ +327.67 Deg.C Default: 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

For more information, please refer to  
[www.yottacontrol.com](http://www.yottacontrol.com)

## Remote Modules

[illegible]

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## Remote Modules

## Mapping Table

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# Remote Modules

[illegible]

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## Address Mapping

### Remote Modules

# Remote Modules

## Mapping Table

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## Address Mapping

### Remote Modules

## Remote Modules

## Mapping Table

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# Remote Modules

## Mapping Table

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# Remote Modules

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# Address Mapping

## Remote Modules

# Remote Modules

## Mapping Table

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# Remote Modules

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# Address Mapping

## Remote Modules

## Remote Modules

### Mapping Table

| A-1036+ Address Mapping            |                                                   |     |       |                                                                                                                                                              |
|------------------------------------|---------------------------------------------------|-----|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supported Modbus Code: 01/02/05/15 |                                                   |     |       |                                                                                                                                                              |
| 00017-00022                        | 0-5 Digital Output Value                          | R   | R     |                                                                                                                                                              |
| 00081-00086                        | 0-5 PWM Enable                                    | R   | R/W   | 0: Disable , 1: Enable                                                                                                                                       |
| 00097-00099                        | 0-2 AB-Phase Enable                               | R   | R/W   | 0: Disable , 1: Enable                                                                                                                                       |
| 00113-00115                        | 0-2 Direction of AB-Phase                         | R/W | R/W   | 0: Dir+ , 1: Dir-                                                                                                                                            |
| 00129-00131                        | 0-2 Power On Direction of AB-Phase                | R   | R/W   | 0: Dir+ , 1: Dir-                                                                                                                                            |
| 00145-00147                        | 0-2 Communication Fail Safe Direction of AB-Phase | R   | R/W   | 0: Dir+ , 1: Dir-                                                                                                                                            |
| 04097-06144                        | 0-2047 Auxiliary Memory (M Flag )                 | R/W | R/W   |                                                                                                                                                              |
| Supported Modbus Code: 03/04/06/16 |                                                   |     |       |                                                                                                                                                              |
| Address 4x                         | Item                                              | NOR | INIT* | NOTE                                                                                                                                                         |
| 40017-40022                        | 0-5 Analog Output Value                           | R/W | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 40033-40038                        | 0-5 Power On Analog Output Value                  | R   | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 40049-40054                        | 0-5 Communication Fail Safe Analog Output Value   | R   | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 40081-40086                        | 0-5 Analog Output Type                            | R   | R/W   | 0: 4-20mA / 1:0-20mA                                                                                                                                         |
| 40097-40102                        | 0-5 Analog Output Value (mA)                      | R   | R     | 4/0-20 : 4/0mA-20mA                                                                                                                                          |
| 40113-40118                        | 0-5 Analog Output Value (0.1mA)                   | R   | R     | 40/0-200 : 4.0/0.0mA-20.0mA                                                                                                                                  |
| 40129-40134                        | 0-5 Analog Output Value (0.01mA)                  | R   | R     | 400/0-2000 : 4.00/0.00mA-20.00mA                                                                                                                             |
| 40145-40150                        | 0-5 Analog Output Value (FSR)                     | R   | R     | 0-10000 : 0.00%-100.00% of FSR                                                                                                                               |
| 40177                              | Communication Fail Safe Time Setting Value        | R   | R/W   | 0-32767 (sec) , 0:Disable                                                                                                                                    |
| 40179                              | All DO Value                                      | R   | R     |                                                                                                                                                              |
| 40211                              | Module Name 1                                     | R   | R     | 0x10 0x26                                                                                                                                                    |
| 40212                              | Module Name 2                                     | R   | R     | 0x00 0x00                                                                                                                                                    |
| 40213                              | Version 1                                         | R   | R     | 0x01 0x00                                                                                                                                                    |
| 40214                              | Version 2                                         | R   | R     | 0x00 0x00                                                                                                                                                    |
| 40215-40220                        | 1-6 Mac Serial Number                             | R   | R     |                                                                                                                                                              |
| 40300                              | Module" s ID In Normal Mode                       | R   | R/W   | 1~255                                                                                                                                                        |
| 40301                              | Protocol In Normal Mode                           | R   | R/W   | 0:RTU , 1:ASCII                                                                                                                                              |
| 40302                              | Baudrate In Normal Mode                           | R   | R/W   | 0 : 1200 bps , 1 : 2400 bps , 2 : 4800 bps , 3 : 9600 bps<br>4 : 14400 bps , 5 : 19200 bps , 6 : 28800 bps , 7 : 38400 bps<br>8 : 57600 bps , 9 : 115200 bps |
| 40303                              | Parity In Normal Mode                             | R   | R/W   | 0:none, 1:odd, 2:even                                                                                                                                        |
| 40304                              | Stop Bits In Normal Mode                          | R   | R/W   | 0:1 bit , 1:2 bit                                                                                                                                            |
| 40305                              | Time Out Setting In Normal Mode                   | R   | R/W   | 0-32767 (ms)                                                                                                                                                 |
| 40609-40620                        | 0-5 Current Output Value(32-bit)                  | R   | R     | 32-bit Floating Value (IEEE754)(Float CD AB)                                                                                                                 |
| 40641-40652                        | 0-5 Current Output Value(32-bit) (mA)             | R   | R     | 32-bit Current Floating Value (IEEE754)(Float CD AB)                                                                                                         |
| 40705-40716                        | 0-5 Current Output Value(32-bit)                  | R   | R     | 32-bit Floating Value (IEEE754)(Float AB CD)                                                                                                                 |
| 40737-40748                        | 0-5 Current Output Value(32-bit) (mA)             | R   | R     | 32-bit Current Floating Value (IEEE754)(Float AB CD)                                                                                                         |
| 40801-40812                        | 0-5 Current Output Value(32-bit)                  | R   | R     | 32-bit Floating Value (IEEE754)(Float BA DC)                                                                                                                 |
| 40833-40844                        | 0-5 Current Output Value(32-bit) (mA)             | R   | R     | 32-bit Current Floating Value (IEEE754)(Float BA DC)                                                                                                         |
| 40897-40908                        | 0-5 Current Output Value(32-bit)                  | R   | R     | 32-bit Floating Value (IEEE754)(Float DC BA)                                                                                                                 |
| 40929-40940                        | 0-5 Current Output Value(32-bit) (mA)             | R   | R     | 32-bit Current Floating Value (IEEE754)(Float DC BA)                                                                                                         |
| 41251-41256                        | 0-5 DO Status High Level                          | R   | R/W   | 400/0-2000 : 4.00/0.00mA-20.00mA                                                                                                                             |
| 41259-41264                        | 0-5 DO Status Low Level                           | R   | R/W   | 400/0-2000 : 4.00/0.00mA-20.00mA                                                                                                                             |
| 41267-41272                        | 0-5 Analog Output Offset (4mA)                    | R   | R/W   | -1000-1000                                                                                                                                                   |
| 41275-41280                        | 0-5 Analog Output Offset (20mA)                   | R   | R/W   | -1000-1000                                                                                                                                                   |
| 41409-41414                        | 0-5 Amplitude of PWM                              | R/W | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 41425-41430                        | 0-5 Frequency of PWM                              | R/W | R/W   | 10-10000 (0.05ms/pulse)                                                                                                                                      |
| 41441-41446                        | 0-5 Duty Ratio of PWM                             | R/W | R/W   | 0-100(%)                                                                                                                                                     |
| 41457-41459                        | 0-2 Amplitude of AB-Phase                         | R/W | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 41473-41475                        | 0-2 Frequency of AB-Phase                         | R/W | R/W   | 10-10000 (0.05ms/pulse)                                                                                                                                      |
| 41489-41494                        | 0-5 Power On Amplitude of PWM                     | R   | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 41505-41510                        | 0-5 Power On Frequency of PWM                     | R   | R/W   | 10-10000 (0.05ms/pulse)                                                                                                                                      |
| 41521-41526                        | 0-5 Power On Duty Ratio of PWM                    | R   | R/W   | 0-100(%)                                                                                                                                                     |
| 41537-41539                        | 0-2 Power On Amplitude of AB-Phase                | R   | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 41553-41555                        | 0-2 Power On Frequency of AB-Phase                | R   | R/W   | 10-10000 (0.05ms/pulse)                                                                                                                                      |
| 41569-41574                        | 0-5 Communication Fail Safe Amplitude of PWM      | R   | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 41585-41590                        | 0-5 Communication Fail Safe Frequency of PWM      | R   | R/W   | 10-10000 (0.05ms/pulse)                                                                                                                                      |
| 41601-41606                        | 0-5 Communication Fail Safe Duty Ratio of PWM     | R   | R/W   | 0-100(%)                                                                                                                                                     |
| 41617-41619                        | 0-2 Communication Fail Safe Amplitude of AB-Phase | R   | R/W   | 0-4000: 4-20mA / 0-20mA                                                                                                                                      |
| 41633-41635                        | 0-2 Communication Fail Safe Frequency of AB-Phase | R   | R/W   | 10-10000 (0.05ms/pulse)                                                                                                                                      |
| 44001-46048                        | 0-2047 Analog Auxiliary Memory (AM Flag)          | R/W | R/W   |                                                                                                                                                              |

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# Address Mapping

## Remote Modules

## Remote Modules

### Mapping Table

| A-1038+ Address Mapping |      |        |                                                   |     |       |                |               |                                                      |
|-------------------------|------|--------|---------------------------------------------------|-----|-------|----------------|---------------|------------------------------------------------------|
| Modbus                  | Num  | Unit   | Item                                              | NML | INIT* | Range          | Default Value | NOTE                                                 |
| 00017                   | 8    | 1-bit  | 0-7 DO Output Value                               | R   | R     | 0/1            | x             | 0/1                                                  |
| 00081                   | 8    | 1-bit  | 0-7 PWM Enable                                    | R   | R/W   | 0/1            | 0             | 0/1                                                  |
| 00097                   | 4    | 1-bit  | 0-3 AB-Phase Enable                               | R   | R/W   | 0/1            | 0             | 0/1                                                  |
| 00113                   | 4    | 1-bit  | 0-3 AB-Phase Direction                            | R/W | R/W   | 0/1            | 0             | 0/1                                                  |
| 00129                   | 4    | 4-bit  | 0-3 Power On Direction of AB-Phase                | R   | R/W   | 0/1            | 0             | 0/1                                                  |
| 00145                   | 4    | 4-bit  | 0-3 Communication Fail Safe Direction of AB-Phase | R   | R/W   | 0/1            | 0             | 0/1                                                  |
| 04097                   | 2048 | 1-bit  | 0-2047 Auxiliary Memory ( M flag)                 | R/W | R/W   | 0/1            | 0             | 0/1                                                  |
| Modbus                  | Num  | Unit   | Item                                              | NML | INIT* | Range          | Default       | NOTE                                                 |
| 40017                   | 8    | 16-bit | 0-7 Analog Output Value                           | R/W | R/W   | 0 ~ 4000       | x             | 0-4000: 0-10V                                        |
| 40033                   | 8    | 16-bit | 0-7 Power On Analog Output Value                  | R   | R/W   | 0 ~ 4000       | 0             | 0-4000: 0-10V                                        |
| 40049                   | 8    | 16-bit | 0-7 Communication Fail Safe Analog Output Value   | R   | R/W   | 0 ~ 4000       | 0             | 0-4000: 0-10V                                        |
| 40097                   | 8    | 16-bit | 0-7 Analog Output Value (V)                       | R   | R     | 0 ~ 10         | x             | 0-10 : 0V~10V                                        |
| 40113                   | 8    | 16-bit | 0-7 Analog Output Value (0.1V)                    | R   | R     | 0 ~ 100        | x             | 0-100 : 0.0V~10.0V                                   |
| 40129                   | 8    | 16-bit | 0-7 Analog Output Value (0.01V)                   | R   | R     | 0 ~ 1000       | x             | 0-1000 : 0.00V~10.00V                                |
| 40145                   | 8    | 16-bit | 0-7 Analog Output Value (FSR)                     | R   | R     | 0 ~ 10000      | x             | 0-10000 : 0.00%~100.00% of FSR                       |
| 40177                   | 1    | 16-bit | Communication Fail Safe Time Setting Value        | R   | R/W   | 0 ~ 32768      | 0             | 0-32767 (sec) , 0:Disable                            |
| 40179                   | 1    | 16-bit | All DO Value                                      | R   | R     | 0 ~ 0xFFFF     | x             |                                                      |
| 40211                   | 1    | 16-bit | Module Name 1                                     | R   | R     | 0 ~ 0xFFFF     | 0x1038        | 0x38 0x10                                            |
| 40212                   | 1    | 16-bit | Module Name 2                                     | R   | R     | 0 ~ 0xFFFF     | 0x0000        | 0x00 0x00                                            |
| 40213                   | 1    | 16-bit | Version 1                                         | R   | R     | 0 ~ 0xFFFF     | 0xA100        | 0x00 0xA1                                            |
| 40214                   | 1    | 16-bit | Version 2                                         | R   | R     | 0 ~ 0xFFFF     | 0x0000        | 0x00 0x00                                            |
| 40215                   | 6    | 16-bit | 1-6 Mac Serial Number                             | R   | R     | 0 ~ 0xFFFF     | x             |                                                      |
| 40300                   | 1    | 16-bit | Module" s ID In Normal Mode                       | R   | R/W   | 1 ~ 255        | 1             |                                                      |
| 40301                   | 1    | 16-bit | Protocol In Normal Mode                           | R   | R/W   | 0 ~ 1          | 0             | 0:RTU , 1:ASCII                                      |
| 40302                   | 1    | 16-bit | Baud Rate In Normal Mode                          | R   | R/W   | 0 ~ 9          | 3             | 0(1200 bps) ~ 9(115200 bps)                          |
| 40303                   | 1    | 16-bit | Parity Option In Normal Mode                      | R   | R/W   | 0 ~ 2          | 0             | 0:none, 1:odd, 2:even                                |
| 40304                   | 1    | 16-bit | Stop Bits In Normal Mode                          | R   | R/W   | 0 ~ 1          | 0             | 0:1 bit , 1:2 bit                                    |
| 40305                   | 1    | 16-bit | Time Out Setting In Normal Mode                   | R   | R/W   | 0 ~ 32767      | 3000          | 0-32767 (ms)                                         |
| 40609                   | 16   | 16-bit | 0-7 Current Output Value(32-bit)                  | R   | R     | 0.0f ~ 4000.0f | x             | 32-bit Floating Value (IEEE754)(Float CD AB)         |
| 40641                   | 16   | 16-bit | 0-7 Current Output Value(32-bit) (V)              | R   | R     | 0.0f ~ 10.0f   | x             | 32-bit Current Floating Value (IEEE754)(Float CD AB) |
| 40705                   | 16   | 16-bit | 0-7 Current Output Value(32-bit)                  | R   | R     | 0.0f ~ 4000.0f | x             | 32-bit Floating Value (IEEE754)(Float AB CD)         |
| 40737                   | 16   | 16-bit | 0-7 Current Output Value(32-bit) (V)              | R   | R     | 0.0f ~ 10.0f   | x             | 32-bit Current Floating Value (IEEE754)(Float AB CD) |
| 40801                   | 16   | 16-bit | 0-7 Current Output Value(32-bit)                  | R   | R     | 0.0f ~ 4000.0f | x             | 32-bit Floating Value (IEEE754)(Float BA DC)         |
| 40833                   | 16   | 16-bit | 0-7 Current Output Value(32-bit) (V)              | R   | R     | 0.0f ~ 10.0f   | x             | 32-bit Current Floating Value (IEEE754)(Float BA DC) |
| 40897                   | 16   | 16-bit | 0-7 Current Output Value(32-bit)                  | R   | R     | 0.0f ~ 4000.0f | x             | 32-bit Floating Value (IEEE754)(Float DC BA)         |
| 40929                   | 16   | 16-bit | 0-7 Current Output Value(32-bit) (V)              | R   | R     | 0.0f ~ 10.0f   | x             | 32-bit Current Floating Value (IEEE754)(Float DC BA) |
| 41251                   | 8    | 16-bit | 0-7 DO Status High Level                          | R   | R/W   | 0 ~ 1000       | 350           | 0-1000 : 0.00V~10.00V                                |
| 41259                   | 8    | 16-bit | 0-7 DO Status Low Level                           | R   | R/W   | 0 ~ 1000       | 80            | 0-1000 : 0.00V~10.00V                                |
| 41275                   | 8    | 16-bit | 0-7 AQ Offset (10V)                               | R   | R/W   | -1000 ~ +1000  | 0             |                                                      |
| 41393                   | 8    | 16-bit | 0-7 Analog Output Value of PWM/AB-Phase           | R   | R     | 0 ~ 4000       | x             | 0-4000: 0-10V                                        |
| 41409                   | 8    | 16-bit | 0-7 Amplitude of PWM                              | R/W | R/W   | 0 ~ 4000       | 4000          | 0-1000 : 0.00V~10.00V                                |
| 41425                   | 8    | 16-bit | 0-7 Frequency of PWM                              | R/W | R/W   | 10 ~ 10000     | 100           | 0.05ms/pulse                                         |
| 41441                   | 8    | 16-bit | 0-7 Duty Ratio of PWM                             | R/W | R/W   | 0-100          | 50            | %                                                    |
| 41457                   | 4    | 16-bit | 0-3 Amplitude of AB-Phase                         | R/W | R/W   | 0 ~ 4000       | 4000          | 0-1000 : 0.00V~10.00V                                |
| 41473                   | 4    | 16-bit | 0-3 Frequency of AB-Phase                         | R/W | R/W   | 10 ~ 10000     | 100           | 0.05ms/pulse                                         |
| 41481                   | 4    | 16-bit | 0-3 Duty Ratio of AB-Phase                        | R   | R     | 50             | 50            | %                                                    |
| 41489                   | 8    | 16-bit | 0-7 Power On Amplitude of PWM                     | R   | R/W   | 0 ~ 4000       | 4000          |                                                      |
| 41505                   | 8    | 16-bit | 0-7 Power On Frequency of PWM                     | R   | R/W   | 10 ~ 10000     | 100           | 0.05ms/pulse                                         |
| 41521                   | 8    | 16-bit | 0-7 Power On Duty Ratio of PWM                    | R   | R/W   | 0 ~ 100        | 50            | %                                                    |
| 41537                   | 4    | 16-bit | 0-3 Power On Amplitude of AB-Phase                | R   | R/W   | 0 ~ 4000       | 4000          |                                                      |
| 41553                   | 4    | 16-bit | 0-3 Power On Frequency of AB-Phase                | R   | R/W   | 10 ~ 10000     | 100           | 0.05ms/pulse                                         |
| 41561                   | 4    | 16-bit | 0-3 Power On Duty of AB-Phase                     | R   | R     | 50             | 50            | %                                                    |
| 41569                   | 8    | 16-bit | 0-7 Communication Fail Safe Amplitude of PWM      | R   | R/W   | 0 ~ 4000       | 4000          |                                                      |
| 41585                   | 8    | 16-bit | 0-7 Communication Fail Safe Frequency of PWM      | R   | R/W   | 10 ~ 10000     | 100           | 0.05ms/pulse                                         |
| 41601                   | 8    | 16-bit | 0-7 Communication Fail Safe Duty Ratio of PWM     | R   | R/W   | 0 ~ 100        | 50            | %                                                    |
| 41617                   | 4    | 16-bit | 0-3 Communication Fail Safe Amplitude of AB-Phase | R   | R/W   | 0 ~ 4000       | 4000          |                                                      |
| 41633                   | 4    | 16-bit | 0-3 Communication Fail Safe Frequency of AB-Phase | R   | R/W   | 10 ~ 10000     | 100           | 0.05ms/pulse                                         |
| 41641                   | 4    | 16-bit | 0-3 Communication Fail Safe Duty of AB-Phase      | R   | R     | 50             | 50            | %                                                    |
| 44001                   | 2048 | 16-bit | 0-2047 Analog Auxiliary Memory (AM Flag)          | R/W | R/W   | 0 ~ 0xFFFF     | 0             |                                                      |

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