

Quick Start Guide

RS-485 Analog I/O Remote Module Model A-1019



1. Package Contents

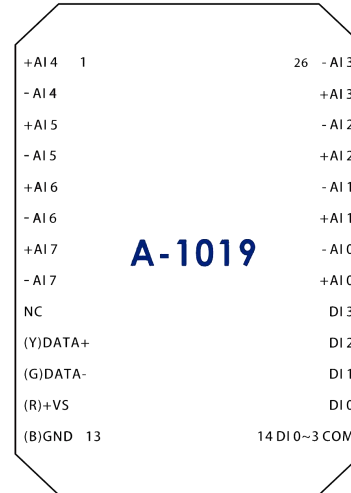
- A-1019 Module 1PCS
- Quick Start Guide (Printed) 1PCS

2. Product Features

- **Digital Inputs(Isolation):** 4
- **Isolation:** YES(5000VDC)
- **Input Operating Frequency:** 10HZ
- **Analog inputs:** 8 (16-bit)
- **Analog input Type:**0/4~20mA,J,K,T,E,R,S,B Thermocouple ,Thermistor
- **Temperature Ranges:** (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)
- **Input Impedance:**Current: 100 Ω / Voltage : 10 MΩ
- **Input Accuracy:** ±0.1%
- **Interface:** RS-485 + USB

- **Communication Baud Rate:** 2400~921600bps
- **Channel Independent Configuration:** YES
- **Sampling Rate:** 10 sample/second (total)
- **Span Drift:** ±50 ppm/°C
- **Zero Drift:** ±18 μV/°C
- **CMR @ 50/60 Hz:** 120 dB
- **Operation Voltage:** 10~30VDC/24VAC
- **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

3. Wiring Diagram



(R)+VS	Power Positive
(B)GND	Power Negative
(Y)DATA+	RS-485+
(G)DATA-	RS-485-
DI0~DI3	Digital Input
DI0~DI3 COM	Digital Common Port (Bipolar)
+AI	Analog Positive
-AI	Analog Negative

4. Installing Software

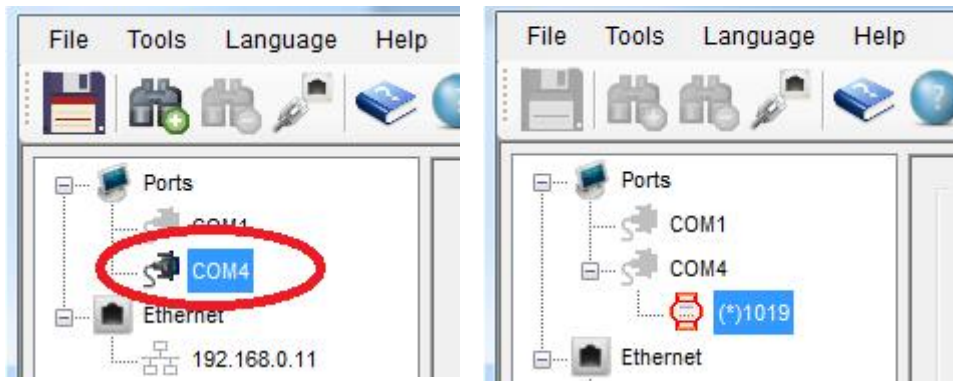
Before you use it, please download and install the following software.


1. The USB driver: [Click Download USB Driver](#)
2. The Utility: [Click Download Utility](#)

5. Configuring the A-1019

- 1) Change the back switch of A-1019 to "Init" mode, and then turn on the 10~30VDC/24VAC power. Use USB or RS-485 to connect A-1019 with PC.


- 2) Run The YottaUtility software.
- 3) Click the Refresh button  to refresh the COM port.



- 4) Click the related COM port, such as the one in the red circle. And then click Search button  to find the module A-1019.

- 5) If you need to set up **the communication parameter**, please follow the below . After the setup is finished, click the “update” button.

- 5) If you need to set up **the Analog input mode**, please refer to the below **figure 2** After the setup is finished, click the “update” button.

- 6) After completing step 6) to change Analog Input mode and clicking the “Update” button, you could click “?” button  for referring to “Analog Input mode specification table.”

- 7) If you need to set up **the temperature compensation**, choose the Thermocouple mode from below **figure3** After the setup is finished, click the “update” button.

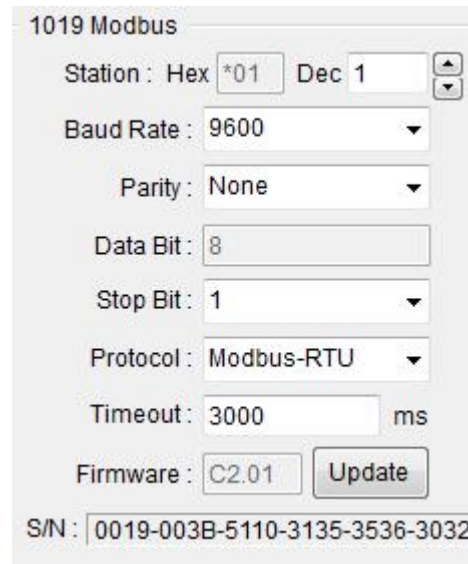


Figure1

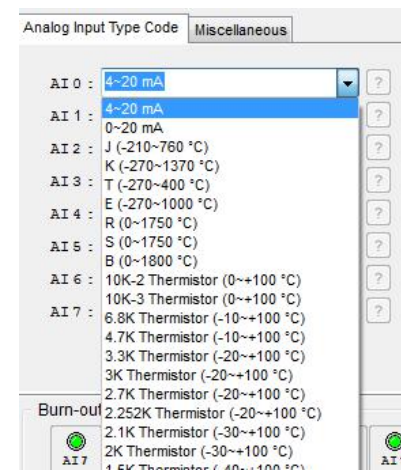


Figure2

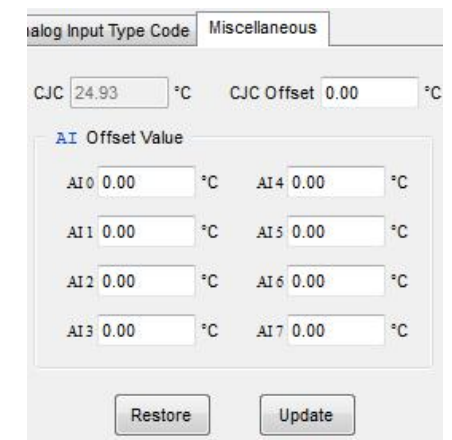


Figure3

- 8) A-1019 can support multiple Analog Input modes. When above PC software setup is completed, unscrew the device housing screws and remove the internal circuit board to set up the Analog Input Jumper Wire. Each Analog Input channel has its Jumper Pin. The initial setup is for 0/4-20mA. The jumper introduction is as below.



0/4-20mA: Pin A short



Thermistor: Pin B short



Thermocouple: Empty Pin A & B



CH0~CH3 PIN

CH4~CH7 PIN

- 9) After completing above Jumper Wire setup, please put the circuit board back into the device housing and lock it. Turn its back switch to “Normal” mode and turn on the power. Then, it’s all done.

Note: If the setup of Analog Input mode for PC software isn't in accordance with its Jumper Wire, the detected data will be in disorder.