Quick Start Guide

RS-485 Analog I/O Remote Module

Model A-1019

1. Check Package Content

- 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

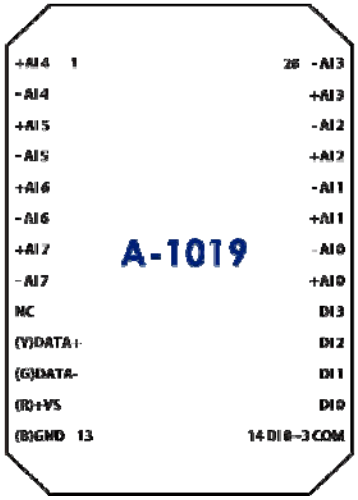
Operation Temperature: -20 to +75 °C

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

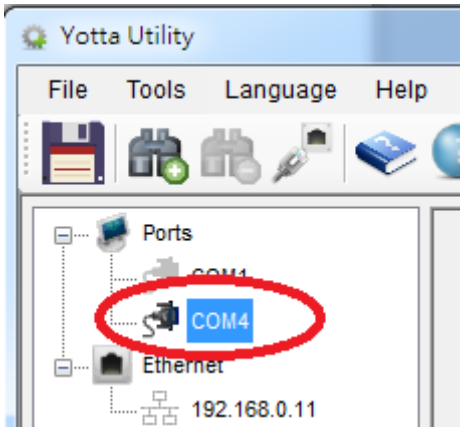
4. Software Installation

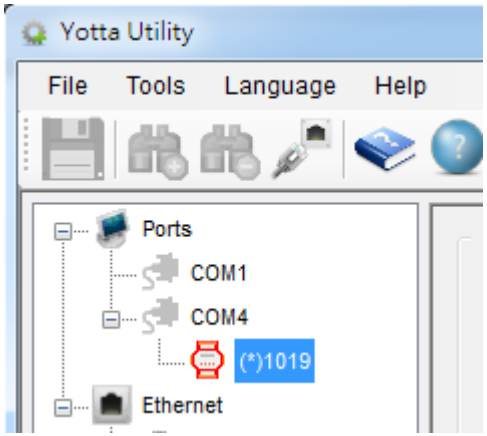
Before the regular use, must finish the related setup process. And prepare below items to finish the setup.

1. Download and install the USB driver from below web link.
   http://www.yottacontrol.com/download/A5X_USB_DRIVER.rar
2. Download and install the YottaUtility software from below web link.
   http://www.yottacontrol.com/download/YOTTA_UTY.rar

5. Configure the A-1019

1) Turn the back switch to Init mode and power on the A-1019. Over the USB or RS-485 to link A-1019 and PC.
2) Open the YottaUtility software.
3) Click the Refresh button to refresh the COM port.





4) Click the related COM port. And then click Search for modules button the to search module.
5) Can setup the communication parameter from below **figure 1**. When finish the setup, must click the update button.
6) Can setup the Analog input mode from below **figure 2**. When finish the setup, must click the Update button.
7) When complete above step 6) Analog Input mode modify and click the Update button, can click "?" button to refer Analog Input mode specification table.
8) Can setup the temperature compensation when chose the Thermocouple mode. When finish the setup, must click the update button.
9) The A-1019 can support multiple Analog Input mode. When complete above PC software setup, unscrew the device housing screws and remove the internal circuit board to setup the Analog Input Jumper Wire. Each Analog Input channel had its Jumper Pin. The initial setup is for 0/4-20mA. The jumper indication is as below.

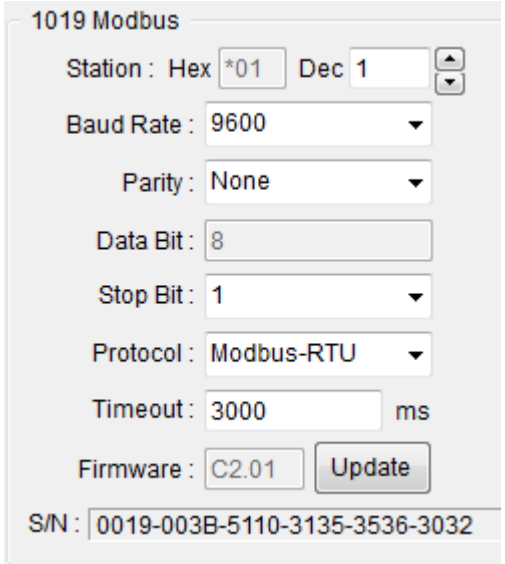


Figure 1

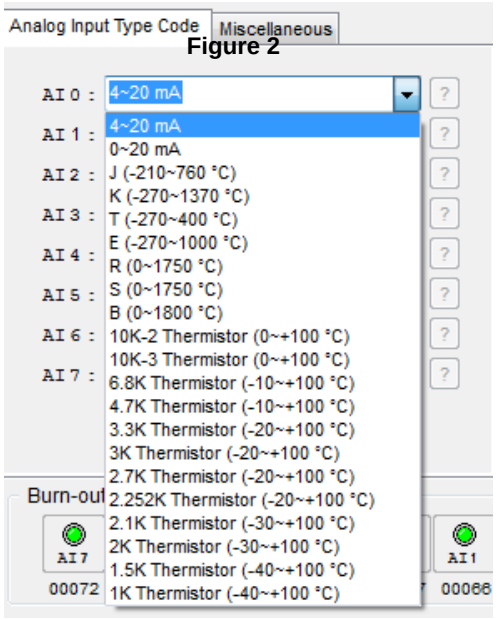
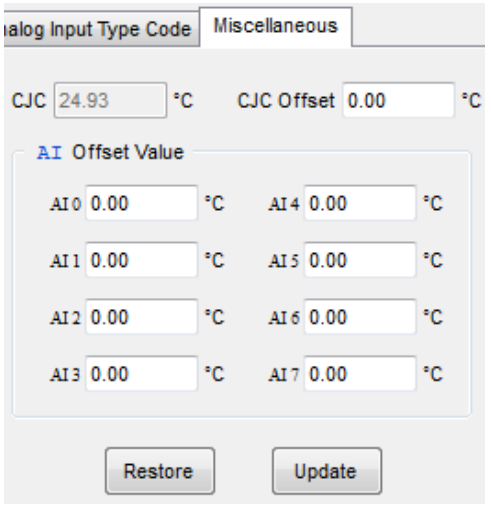
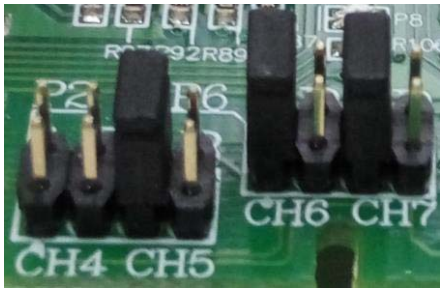


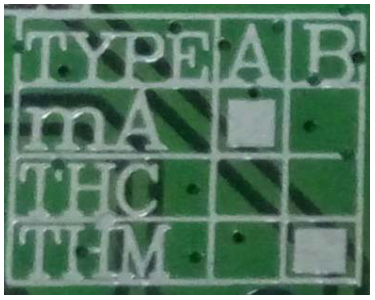
Figure 2



Wire. Each Analog Input channel had its Jumper Pin. The initial setup is for 0/4-20mA. The jumper indication is as below.

0/4-20mA: Pin A short. Thermistor: Pin B short. Thermocouple: Empty Pin A & B.





10) When complete above Jumper Wire setup, place the circuit board back into the device housing and lock it. Turn the device back switch to Normal mode and power on.
11) Done.

Note: If the Analog Input mode PC software setup and Jumper Wire not synchronized, the data will be mistake.