GT100-EI-RS and GT200-EI-2RS485 Products FAQ

V1.0

| Version | Update time | Update notes |
|---|---|---|
| V1.0 | 1-15-2022 | New Release |

**1. After powering 24VDC, indicators are off.**

GT100-EI-RS and GT200-EI-2RS485 Standard Working Voltage: 24V DC (90mA).

The gateway power interface is a three-pin connector. Please connect power 24V+ to gateway V+ and 24V- to GND. No need to connect pin NC.

**2. What is the configuration software for GT100-EI-RS and GT200-EI-2RS485?**

Customer should use SST-MI-CFG for configuring GT100-EI-RS and SST-GT-CFG for configuring GT200-EI-2RS485.

**3. What kind of PLC and robots are frequently used as an EtherNet/IP master? What is the corresponding modeling software?**

That is AB PLC, Omron PLC, Schneider PLC, Fanuc robots and ABB robots.

The modeling software of AB PLC is RXlogix5000 or Studio 5000. Omron PLC uses CX-ONE or Sysmac Studio. Schneider PLC uses Unity pro XL.

Fanuc robots and ABB robots, both of them use communicator or panel for EtherNet/IP modeling configuration.

**4. What information do customers need to provide when configuring serial port of GT100-EI-RS and GT200-EI-2RS485?**

a. When configuring a Modbus serial device, the customer needs to provide the device communication parameters, such as Baud Rate, Check Bit, Stop Bits, etc., as well as the node address and Modbus register address table.

b. If the GT100-EI-RS User Config mode is selected, in addition to the communication parameters, it is also necessary to know the communication mode of the gateway, such as Request and Response mode, only Sending and only Receiving mode, etc. EtherNet/IP master station receiving data frame format: Transaction No (1byte) + Number of bytes (1byte) + Data (n byte), the master station output data frame format is transaction No (1byte) + Number of bytes (1byte) + Data (n byte).

**5. When the gateway is configured with a network cable, the gateway cannot be scanned, how can I solve it?**

a. Firstly, confirm whether it is a static IP or a DHCP. When the Assign IP Mode is DHCP, the gateway and the configured PC should be connected to the router. When using a static IP, the IP of the PC should be set to a fixed IP and be in the same network segment as the gateway.

b. When the gateway IP is not confirmed, switch to the configuration mode through the DIP switch of GT200-EI-2RS485, the IP of configuration mode is fixed 192.168.0.10. Long press the reset button for 3 seconds of GT100-EI-RS, the gateway IP is fixed 192.168.0. 11.

**6.Does AB PLC need to load EDS files?**

You can use IO mode to do the modeling of AB PLC (that is, select the gateway corresponding to the Generic EtherNet Module in the corresponding software of the PLC), without adding the EDS file of the gateway.

**7.What is the corresponding number of bytes when AB PLC configures GT100-EI-RS and GT200-EI-2RS485 gateways?**

The connection parameters provided by the GT100-EI-RS gateway are as follows:

Input Instance：102 (128 Bytes), 112 (256 Bytes), 122 (492 Bytes), 132 (64 Bytes), 142 (32 Bytes), 152 (16 Bytes), 162 (8 Bytes)

Output Instance： 101 (128 Bytes), 111 (256 Bytes), 121 (492 Bytes), 131 (64 Bytes), 141 (32 Bytes), 151 (16 Bytes), 161 (8 Bytes)

Configuration Instance： 103 (10 Bytes), 113 (10 Bytes), 123 (10 Bytes), 133 (0 Bytes), 143 (0 Bytes), 153 (0 Bytes), 163 (0 Bytes).

The connection parameters provided by the GT200-EI-2RS485 gateway are as follows:

Input Instance： 102 (128 Bytes), 112 (256 Bytes), 122 (492 Bytes).

Output Instance：101 (128 Bytes), 111 (256 Bytes), 121 (492 Bytes).

Configuration Instance：113 (10 Bytes).

**8. How to confirm whether the serial communication is normal?**

a. If GT100-EI-RS and GT200-EI-2RS485 serial ports are connected to Modbus devices, and the corresponding serial port TX and RX are blinking, the serial port communication is normal.

b. If the serial port device is an active sending device, the corresponding serial port RX light is blinking green, and the TX light is off, which is a normal state.

c. If the serial device is a User Config protocol Request and Response device, both the TX and RX lights flash green, and the green light blinking frequency of TX is determined according to the sending frequency of the customer's master station.

**9.How to judge whether the Ethernet connection of the gateway is normal?**

a.When the GT 100-EI-RS is connected to the EtherNet/IP client, the SNS is solid green. The ENS and SNS light of the GT200-EI-2RS485 are solid green.

b.If the host computer is an AB PLC, the AB PLC is running when the connection is normal, and the gateway icon does not have an exclamation mark.

c.If the host computer is an Omron PLC, the Omron PLC can see that the gateway node in the diagnostic node displays green when it is running.

**10. When the connection is normal, I can also read the data but find that all the data is incorrect.**

a. The data can be converted into hexadecimal numbers and compared with the header data (the header data is also converted into hexadecimal numbers) to confirm whether byte or register swap is required.

b. Check the conflict detection in the configuration to see if the configured memory mapping addresses are arranged in order, if not, you can use the automatic mapping to download the configuration again.

c. "Response Timeout" and "Delay between Polls" are too small.
d. Check whether the configured register address is consistent with the actual one, and you can also use the Modbus master station simulation software (such as Modbus Poll, ModScan32) to debug the device.
e. In the case of interference, one 120 ohms terminal resistor can be added to each end of RS485.

**11.What should I do if the communication is abnormal after the gateway as a Modbus master is connected to the device?**

a. Whether the serial port wiring is normal, the data positive (A+) and data negative (B-) accord with the positive and negative of connected device, and the TX of RS232 is connected to the RX of the device, and the TX is connected to the RX device. The GND of the device is connected to the GND of the device.
b. Whether the communication parameters such as the baud rate and slave address configured by the gateway are consistent with the connected device, and whether the register address is consistent with the one of the actual device.
c. Use Modbus master simulation software (such as Modbus Poll, ModScan32) to debug the device.