GT200-HT-MT
HART/Modbus TCP Gateway

Product Overview

GT200-HT-MT is a gateway which supports Modbus TCP slave and HART master. It can achieve the data exchange between single channel HART and Modbus TCP. HART side can be configured as a primary master or a secondary master.

Technical specifications

[1] HART side can be used as a primary master or the secondary master;

[2] Support one HART channel, support connecting at most 13 instruments with gateway internal resistor (270Ω/2W) and support connecting 15 instruments with an external resistor (250Ω/2W);

[3] HART side support single-point and multi-point mode, under single-point mode, support data burst operation of HART slave device;

[4] Support all commands of the HART protocol;

[5] Each HART command can be configured for change-of-state output, polling output, initialization output or no output;

[6] Each channel of HART supports up to 100 user commands, the output data buffer area can be up to 2000 bytes, and the input data buffer area up to 3000 bytes;

[7]Operating temperature: -4 ° F to 140 ° F(-20°C~60°C), relative humidity 5% ~ 95% (no condensing);

[8] Power: 24VDC (9V~30V), <100mA (24VDC);

[9] External Dimensions (W*H*D): 1.57in*4.92in*4.33in (40mm* 125mm * 110mm);

Power interface

Power interface is shown as below:

GND NC 24V+

1   2   3
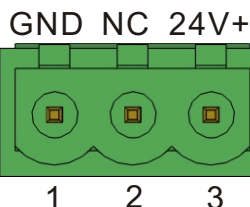
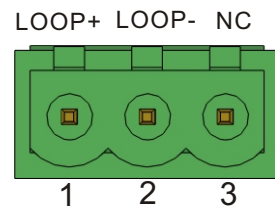| Pin	Function
1	Power GND
2	NC(Not Connected)
3	24V+, DC Positive 24V

Features

- Easy to use: User simply refers to the product manual and application example, configure the gateway according to the requirements then can achieve communication in a short period of time;
- Ethernet 10/100M adaptive;
- IP address conflict detection;
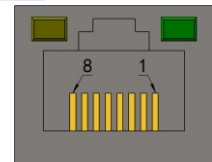- Provide easy-to-use configuration software SST-HE-CFG.

HART interface

HART interface is shown as below:

LOOP+ LOOP-   NC

1   2   3

Pin	Function
1	HART LOOP+, Connect HART signal negative
2	HART LOOP-, Connect 24V power negative
3	NC, Not Connected

Ethernet interface

Ethernet interface uses RJ-45 connector; its pin (standard Ethernet signal) is defined as below:

Pin	Signal Description
S1	TXD+, Tranceive Data+, Output
S2	TXD-,Tranceive Data-, Output
S3	RXD+, Receive Data+, Input
S4	Bi-directional Data+
S5	Bi-directional Data-
S6	RXD-, Receive Data-, Input
S7	Bi-directional Data+
S8	Bi-directional Data-

Appearance

- power supply
- DIP switch
- DP indicators
- Ethernet indicators
- Ethernet RJ45 interface
- HART interface

Indicators

Indicator	State	State description
TX	Blinking	HART channel data is sending
	OFF	No data sending
RX	Blinking	HART channel data is receiving
	OFF	No data receiving
NS	Green LED OFF	No Modbus TCP data is exchanging
	Green LED Blinking	Modbus TCP data is exchanging
MS	Red LED ON	Indicate confliction of IP address
	Red LED Blinking	Connection OFF, configuration status, DHCP, BOOTP, IP address conflict detection with Modbus TCP
	Red LED Blinking(For 3 seconds)	Connection OFF with Modbus TCP

Configuration switch
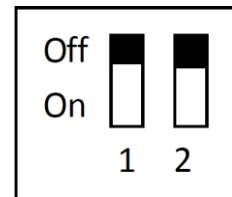
The DIP switch is located at the bottom of the gateway, bit 1 is mode bit and bit 2 is function bit.

Mode (bit 1)	Function (bit 2)	Description
Off	Off	Run mode, enable read/write the configuration data
Off	On	Run mode, disable read/write the configuration data
On	Off	Configuration mode, IP address is fixed: 192.168.0.10, User can read/write the configuration data
On	On	Reserved

Notes:

Restart GT200-HT-MT (power off and power on) after resetting the configuration to make the configuration take effect!