

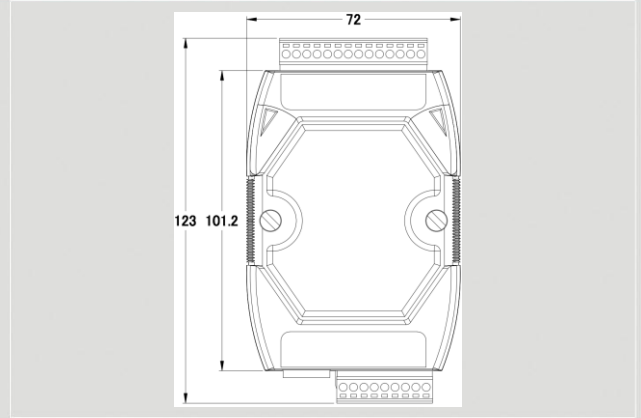


HART Series Products

Modbus/TCP to HART Gateway



HRT-711



Dimensions

The HRT-711 Gateway is specially designed for the master device of HART protocol. It allows the Modbus/TCP master device to access the HART slave devices. These HART devices may be a transmitter, an actuator, a current output device and so forth. In addition, we also provide the utility software for users to configure the HRT-711. By using this module, users can integrate their HART devices into Modbus network easily.

Features

- Support HART Short/Long frame
- Support HART Burst mode
- Allow two HART Masters
- Support Modbus/TCP Format
- Support Modbus Slave / HART Master Mode
- Support Firmware Update via Com Port
- Support On-line Replacement of HART Devices
- Support Acquire Long Frame Address Automatically
- Provide LED indicators
- Built-in Watchdog
- 4KV ESD Protection

Utility Features

- Read/Write HART device by HART command
- Provide diagnostic Information
- Read/Write module configuration of the HRT-711
- Show Modbus address of HART command

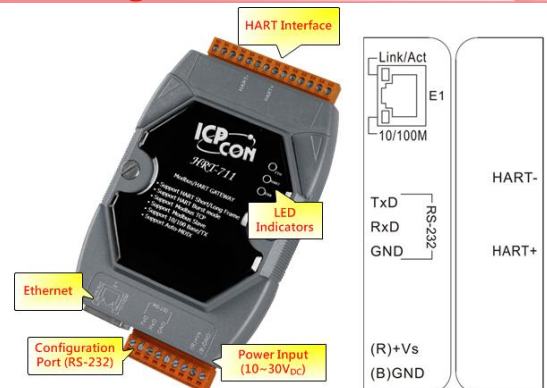


Modbus Support

- Support the following Modbus commands.

| Code | Name | Description |
|------|-------------------------|---|
| 01 | Read Coil Status | Read the ON/OFF status of discrete outputs in the slave |
| 02 | Read Input Status | Read the ON/OFF status of discrete inputs in the slave |
| 03 | Read Holding Registers | Read the binary contents of holding registers in the slave |
| 04 | Read Input Registers | Read the binary contents of input registers in the slave |
| 05 | Force Single Coil | Write a single output to either ON or OFF in the slave |
| 06 | Preset Single Register | Write an integer value into a single register in the slave |
| 15 | Force Multi. Coils | Write each coil in the sequence of coils to either ON or OFF in the slave |
| 16 | Preset Multi. Registers | Write a block of contiguous registers in the slave |

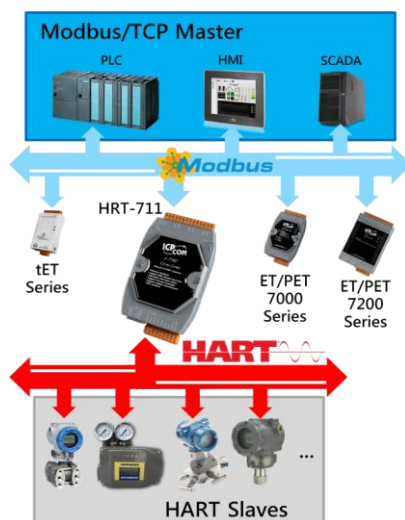
Pin Assignments



Hardware Specifications

| Ethernet Interface | |
|------------------------------------|--|
| Ethernet | RJ-45 with 10/100Base-TX Ethernet Controller (Auto-negotiation, Auto-MDIX) |
| UART Interface (For Configuration) | |
| COM 1 | RS-232(3 wire) with 9-pin screwed terminal block |
| HART Interface | |
| HART Channel | 1 |
| HART Interface | 2-pin screwed terminal block |
| HART Device | 2-wired or 4-wired HART devices |
| HART Topology | Point to Point or Multi-Drop |
| HART Data | Only Digital Data |
| HART Frame Type | Short and Long Frame |
| Burst Mode | Supported |
| Max. HART Device | 15 |
| Loop Resistor | 250 Ω resistor by Jumper |
| Isolation | Follow UL1577 Spec. |
| Hardware | |
| Watchdog | Watchdog IC |
| ESD Protection | 4 kV class A |
| Power supply | Unregulated +10 ~ +30 V _{DC} |
| Protection | Power reverse polarity protection, Over-voltage brown-out protection |
| Power Consumption | 1 W |
| Mechanism | |
| Installation | DIN-Rail or Wall Mounting |
| Dimensions | 72 mm x 35 mm x 121 mm (W x L x H) Detail |
| Environment | |
| Operating Temp. | -25 °C ~ +75 °C |
| Storage Temp. | -30 °C ~ +85 °C |
| Humidity | 5% ~ 95% RH, non-condensing |

Applications



Ordering Information

| | |
|-------------------|-----------------------------------|
| HRT-711 CR | Modbus/TCP to HART Gateway (RoHS) |
|-------------------|-----------------------------------|