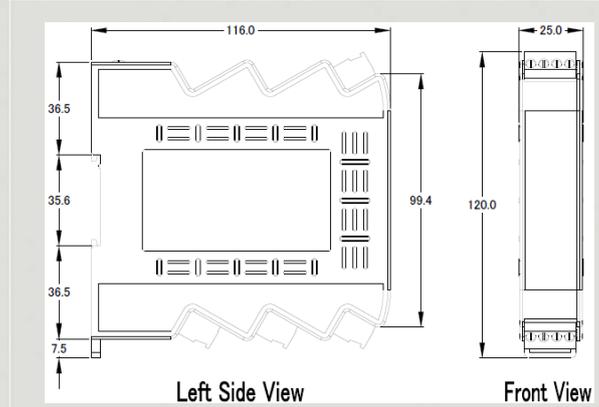


## Modbus Signal Filter (Upright)



**HRT-370**



**Dimensions**

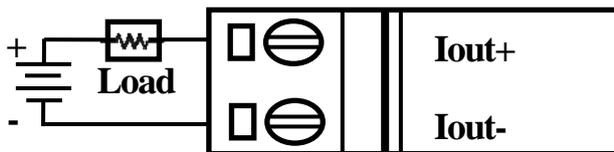
HRT-370 is a HART signal filter specially designed to solve the issue that analog signal gets interfered while additional HART signal adding to communication process. When connecting HRT-370 to a HART instrument, it splits the input HART signal to two output channels, one keeps the original HART signal and another filter the HART signal out to output pure analog signal. Therefore, users can make both HART and analog current data collection and processing easier and more precise by applying HRT-370.

### Features

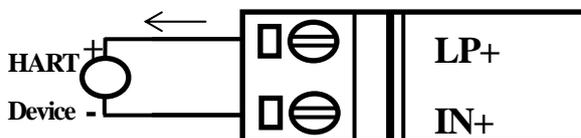
- 1 analog current output (HART signal filter) channel
- 1 by pass HART signal channel
- Support HART Burst mode
- Allow two HART Masters
- Support point-to-point HART mode
- Provide PWR/ HART/AO LED indicators
- 4KV ESD Protection
- Support Loop Power function (module provides +30V)
- Built-in load resistor (250 Ohm, 2W)
- Support DIN-Rail installation

### Wiring

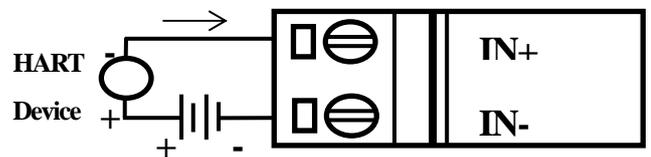
#### Analog Output



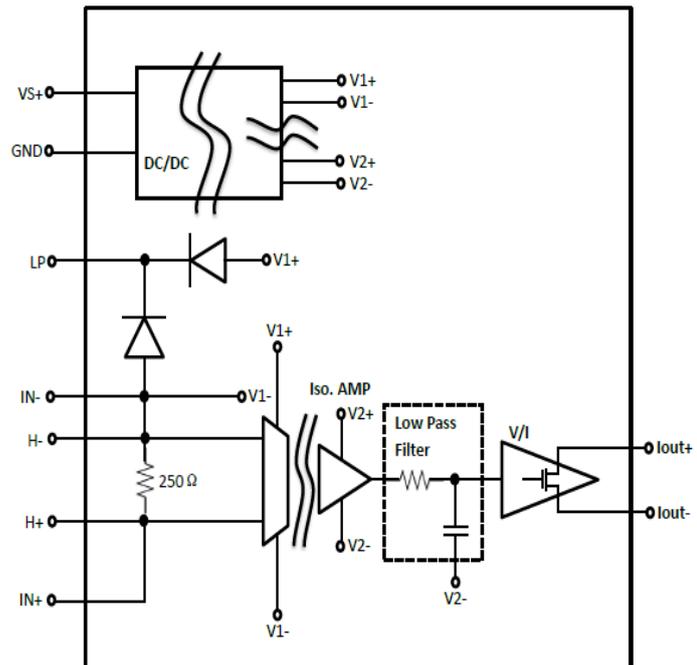
#### HART Device Loop Power Mode



#### HART Device



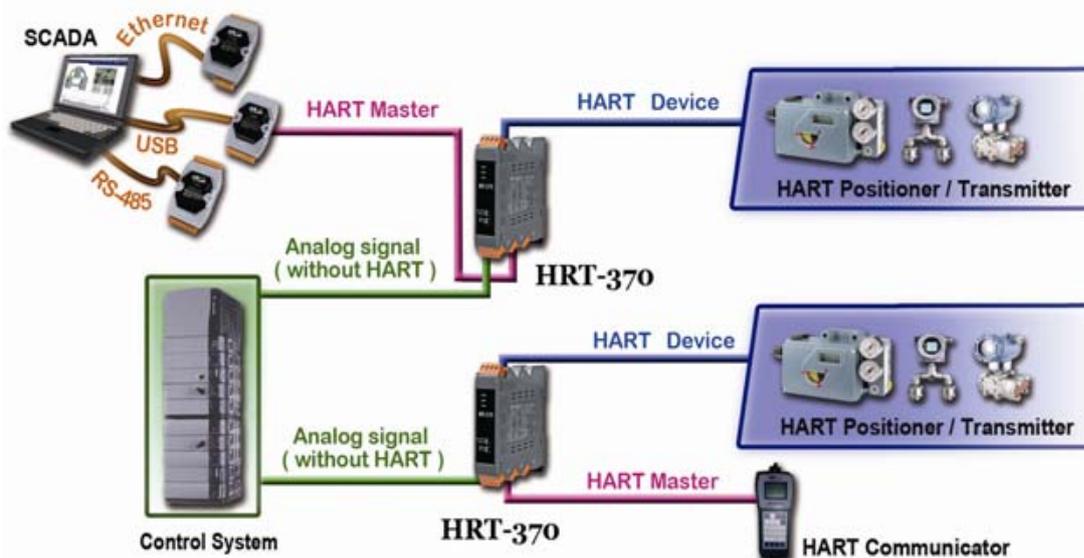
### Function Diagrams



## Hardware Specifications

| Analog input with HART Interface |  |
|----------------------------------|--|
| HART Connector                   | One 4-pin screwed terminal block (LP+, H+, H-)                                       |
| HART Device                      | 2-wired or 4-wired HART devices (Point to Point)                                     |
| 4KV ESD Protection               | Yes  |
| Isolation Voltage                | 2500 VDC   |
| Loop Power                       | Yes (module provides +30V output)  |
| Auxiliary Supply                 | 24V @ 20mA   |
| Input Impedance                  | 250 Ω ± 5% (2W)  |
| Analog Output Interface          |  |
| Analog Output Connector          | One 2-pin screwed terminal block ( IOUT+, IOUT-)                                     |
| Current Output Capacity          | External +30V @ 800Ω (Sink)  |
| Zero/Span Drift (25°C)           | 4~20mA ± 0.1% FSR  |
| Zero/Span Drift (-30/+80°C)      | 4~20mA ± 0.5% FSR  |
| Response Time                    | 40ms @ 250 Ω   |
| Isolation Voltage                | 2500VDC  |
| Power                            |  |
| Power Supply                     | Unregulated +10 ~ +30 VDC  |
| Protection                       | Power reverse polarity protection, Over-voltage brown-out protection                 |
| Power Consumption                | Maximum: (20mA) => 0.05mA @ 30VDC, 1.5W  |
| Mechanism                        |  |
| Installation                     | DIN-Rail   |
| Dimensions (W x L x H)           | 25 mm x 116 mm x 120 mm  |
| LED Display                      | PWR: Module power status<br>HART: HART connection status<br>AO: AO connection status |
| Environment                      |  |
| Operating Temp.                  | -25 °C ~ +75 °C  |
| Storage Temp.                    | -30 °C ~ +80 °C  |
| Humidity                         | 5% ~ 95% RH, non-condensing  |

## Application



## Ordering Information

|                |                                     |
|----------------|-------------------------------------|
| <b>HRT-370</b> | HART Signal Filter (Upright) (RoHS) |
|----------------|-------------------------------------|