

# Modbus RTU Remote I/O Module

daviteq



## Highlight Features

- 4 x Analog Input to measure 0-10VDC or 0-20mA
- Analog Inputs can be used as Digital Input
- 4 x Digital Input with Counting function
- 3 x SPDT Relay output, Latch enable
- 1 x Pulse Output for PWM & Pulsar upto 2.5KHz for LED lighting controls or Heater controls
- RS485/Modbus RTU communication for Master connection
- DIN rail mounting for easy installation

## Specification

### 1. Digital Input

- 04 channels, Opto-coupler
- Input Resistance: 4.7 Kohm
- Isolation Voltage: 5000Vrms
- Logic 0: 0-1V
- Logic 1: 5-24V
- Functions: reading logic 0/1, Pulse Counter (max 4KHz, range: 0 - 4,294,967,295)

### 3. Electro-mechanical Relay

- 03 channels
- Contacts: SPDT, NO/NC
- ☑ Contacts Rating: 24VDC/5A, 220VAC/3A
- Indicator: LED
- Latch: enable/disable
- ☑ Preset status: Yes

### 5. Modbus Communication

- 01 channel
- Protocol: Modbus RTU
- c/w external Resistor: 120 Ohm/ 0.25W
- ☑ Address: 1 -247, 0 is Broadcast
- Baud rate: 9600, 19200
- Parity: none, odd, even (Default: Address 1, Baud rate: 9600, Parity: none)
- Status Led:
  - » Led on: Modbus OK
  - » Led blinks: wrong data
  - » Led off: no communication

### 7. Reset button:

- Press & keep reset button in between 8-15s it will reset the RS485 port to default setting (for connecting to Configuration software on PC)

### 2. Analog Input

- ☑ 04 channels, common ground, non-isolated
- Select types by DIP Switch: 0-10V, 0-20mA
- Resolution: 12bit (Value: 0 - 4095)
- Functions: reading analog value, or can be configured as Digital Input (max 24VDC, non-isolated)

### 4. Open-collector Output

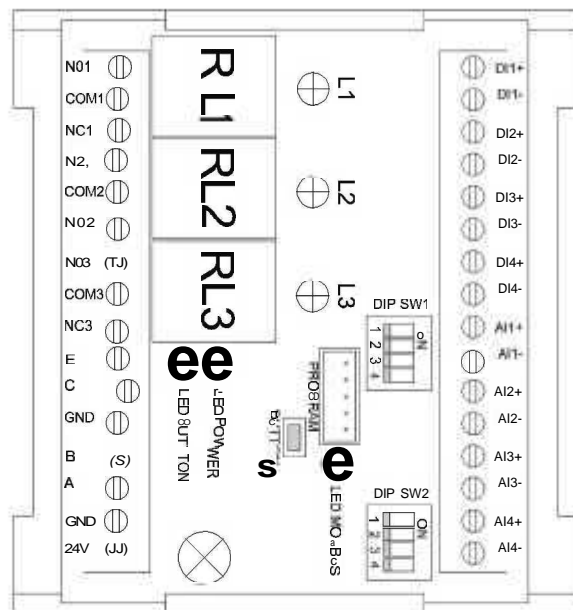
- ☑ 01 channel, Open-collector, Isolated
- Current: 10mA max, V<sub>ceo</sub>=80V
- Functions: PWM (max 2.5KHz), ON/OFF, PULSER (max 65535 pulses, max 2.5KHz)

### 6. General

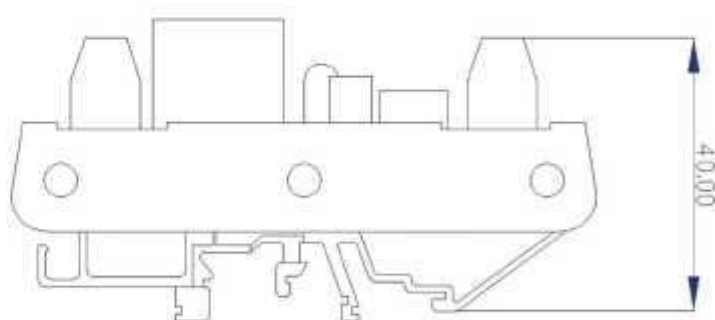
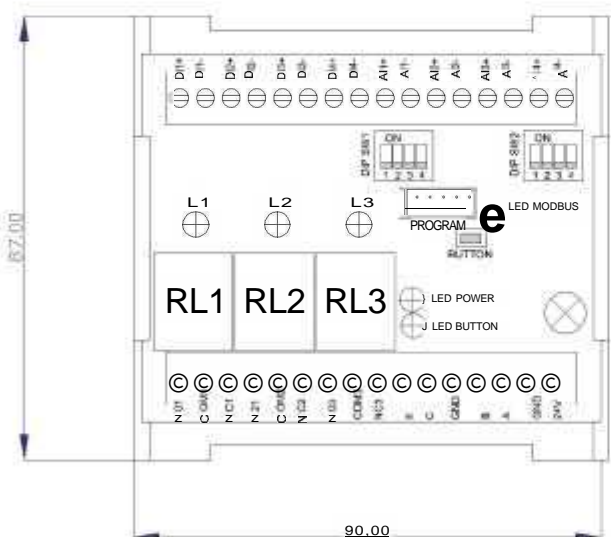
- Power supply: 9...36VDC
- Current consumption: 15...100mA@24VDC supply
- ☑ Mounting type: DIN Rail
- Screw Terminal Block 5mm
- Voltage rating: 300VAC
- Wire size: 12-24AWG
- Ambient: 0-60 degC, 95% RH non-condensed

### 8. Ordering Code: STHM-MBIO-4AI4DI

## Terminal Assignment



## Dimensions (mm)



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