



Features

- Two Channel 0~10V 12 bit Resolution ADC
- Modbus RS-485 Protocol Interface.
- Individual Channel offset calibration
- Resolution at 0.005 V
- Convenient address selection rotatory switch from 1 – 99 Address
- Complete range of baud rate settings supported
- Sensor open indication
- Suitable for both Din Rail and Wall Mountable
- Product Dimensions 110mm x 50mm x 55mm (L x W x H)

Supported Modbus Function Codes

- 02 – Read Discrete Inputs
- 03 – Read Holding Registers
- 04 – Read Input Registers
- 06 – Write Single Register
- 16 – Write Multiple Registers

Discrete Inputs (Read Only)

- 0x1.1 (1.1)
 - Unused
- 0x1.2 (1.2)
 - Unused
- 0x1.3 (1.3)
 - Channel 1 Sensor Status.
1 indicates Sensor Open 0 indicates Working
- 0x1.4 (1.4)
 - Channel 2 Sensor Status.
1 indicates Sensor Open 0 indicates Working

Input Registers (Read Only)

- 0x1 (1)
 - Channel 1 Voltage in 16bit signed decimal values at resolution 0.001
- 0x2 (2)
 - Channel 2 Voltage in 16bit signed decimal values at resolution 0.001

Holding Registers (Read/Write)

- 0x1 (1)
 - CH1 Voltage Offset Calibration Register
-10000 to +10000 in 0.001 Voltage accuracy
- 0x2 (2)
 - CH2 Voltage Offset Calibration Register
-10000 to +10000 in 0.001 Voltage accuracy

0x65 (101)

- Device Address as per the address switch – (Read Only for Devices with Address switch)

0x66 (102)

- Baud Rate

0 – 300	7 – 9600
1 – 600	8 – 14400
2 – 1200	9 – 19200
3 – 1800	10 – 38400
4 – 2400	11 – 57600
5 – 4800	12 – 62500
6 – 7200	13 – 115200
	Default. 9 – 19200

0x67 (103)

- Parity, Stop Bit

0 – 8 N 1
1 – 8 E 1
2 – 8 O 1
3 – 8 N 2
4 – 8 E 2
5 – 8 O 2
Default. 0 – 8 N 1

Default Mode Switch

Default mode is handy when the serial communication setting are forgotten.

Setting the Address switch to 00 will put the device in default mode

- Address Set to 00 - Default mode ON
 - Slave Address – 1, Baud 19200, 8N1
- Address Set to non 00 - Default mode OFF
 - As per the saved configuration values.

Note:

No parameter selection is changed just by entering the default mode. All the parameters remains same including the communication settings unless changed by the master or if there is a corruption in data error indicated in normal mode the device will try to recover to Factory settings.

This mode can be used to read the present settings and/or change the settings

Sensor Open indication

If Channel 1 or 2 Sensor is not connected value is read as 0.0 mA and corresponding Discrete Input bit is set.

Diagnostics

- Tx LED - Quick Blink Indicates Tx Data in Normal operation
- Rx LED - Quick Blink Indicates Rx Data in Normal operation
- Power LED - Power Supply Status

Electrical Details

Power Supply: 12V to 24 V DC

Connector Type: 5.08mm Fixed Screw terminal block

Top Connector Power

RS485

A+	B-	E
1	2	3

Bottom Connector

Power

V+	V-
1	2

Sensor Connector

Channel 1

Channel 2

CH1+	CH1-	CH2+	CH2-
1	2	3	4