Analog Modbus Module

USER'S MANUAL





Seetharam Mechatronics Pvt. Ltd.

Office: #3, 8th Street, Vaishnavi Nagar, Chennai-600 109, India.

Web: www.seetharam.in

Email: ram@seetharam.in



Table of Contents

Sl.No Description

OI.	lechnical Specification	04
02.	Electrical Connection	05
03	Product Description	05

Page No

03.	Product Description	05
04.	Precaution	08
05	Warning	00

04.	Precaution	08
05.	Warning	09
06.	DO'S and DON'T'	09

1. Technical Specification

Model	AM205				
Power supply	12 to 30VDC				
Watchdog timer	System & Communication				
Supported protocols	Modbus RTU				
Channels	3				
Input Impedance	1Mt for Voltage				
Input type	V, mA & TC-K (mV)				
Input range	0-10VDC,0-20mA & -200 to 1350°C				
Accuracy	Voltage mode: ±0.1% or better than				
	Current mode: 40.2% or better than				
	Temperature: #1°C or better than				
A/D Resolution	24b#				
Communication	RS485				
Sampling Rate	30 Sample/Sec/Channel for Voltage / Current				
	10 Sample/sec for TC				
Baud rate	9600 - 115200kbps (User selectable through dip switch)				
Slave Id	1 - 15 (user selectable through dip switch)				
Overvoltage Protection	YES				
Built-in TVS/ESD Protection	YES				
Operating Temperature (*C)	0-60				
Storage Temperature (°C)	- 10 to 85				
Protection class	IP40 (Enclosure), IP30 (Base plate), IP20 (Connecter cutout)				
Mounting	Rail-DIN EN 60715				
Dimension (mm)	17.5 x 90 x 71				
Weight (gm)	65				

2. Electrical Connection

1 - TC -ve 7 - RS485-ve

2 - AIN 2-ve 8 - RS485+ve

3 - AIN 1-ve 9 - NO Connection

4 - TC +ve 10 - Power-ve

5 - AIN 2+ve 11 - Power+ve

6 - AIN 1+ve 12 - NO Connection

3. Product Description

Power on/off

Baudrate Slave Id

Terminal

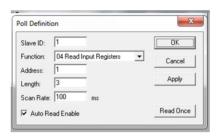
Note: Dip switch 8 — ON (Current Input)
OFF (Voltage Input)

Software Settings

- Connect RS 485 converter to PC.
- Right click my computer manage device manager
 ports displays connected port
- Go to connection select port, select the baud rate (as in dip switch)
- Data bits selection
 - 8 data bits
 - None parity
 - 1 stop bit
- Select Mode RTU
- Press OK



- Go to poll definition
- Select the Slave ID (as in dip switch)
- Select function read input registers
- Press ok



 Connection will be established between modbus and PC.

4. Precaution

- Please keep it out of wet places
- Do not set it up near vibration & impulse, high temperature and humidity.

- Keep it out of the direct rays of the sun. Set it up where there is less dust, and Keep it out of direct air including salt and ion.
- Do not use when there is inflammable gas or heavy machinery, and smog.
- Use insulated tuner.

5. Warning

" It is strictly forbidden to use this product for any other purpose of use or to attempt to make any alteration on this product."

Ø 6. DO'S

- Check for product labels. If connection details on product not available contact factory.
- Check for input and output terminal polarity before switch on the power supply.

- · Use regulated DC power supply
- Ensure module working status by power led indication
- Ensure proper mounting on din rail 60715

- Interchange polarity connection at input (or) output terminal.
- Interchange connection between input and output terminal side.
- · Physical load on module
- · If Dip Switch 8 is ON Don't excite voltage input

7. Procedure

- · Terminate according to electrical connection
- Select baud rate and slave id in dipswitch

BAUD RATE	7	6	5	DEVICE ID	4	3	2	1
9600	OFF	OFF	OFF	1	OFF	OFF	OFF	ON
2400	OFF	OFF	ON	2	OFF	OFF	ON	OFF
4800	OFF	ON	OFF	3	OFF	OFF	ON	ON
9600	OFF	ON	ON	4	OFF	ON	OFF	OFF
19200	ON	OFF	OFF	5	OFF	ON	OFF	ON
38400	ON	OFF	ON	6	OFF	ON	ON	OFF
57600	ON	ON	OFF	7	OFF	ON	ON	ON
115200	ON	ON	ON	8	ON	OFF	OFF	OFF
				9	ON	OFF	OFF	ON
				10	ON	OFF	ON	OFF
				11	ON	OFF	ON	ON
				12	ON	ON	OFF	OFF
				13	ON	ON	OFF	ON
				14	ON	ON	ON	OFF
				15	ON	ON	ON	ON

8 OFF - Voltage I/P ON - Current I/P

Use Rs485 to usb converter for establishing connection between pc and module



