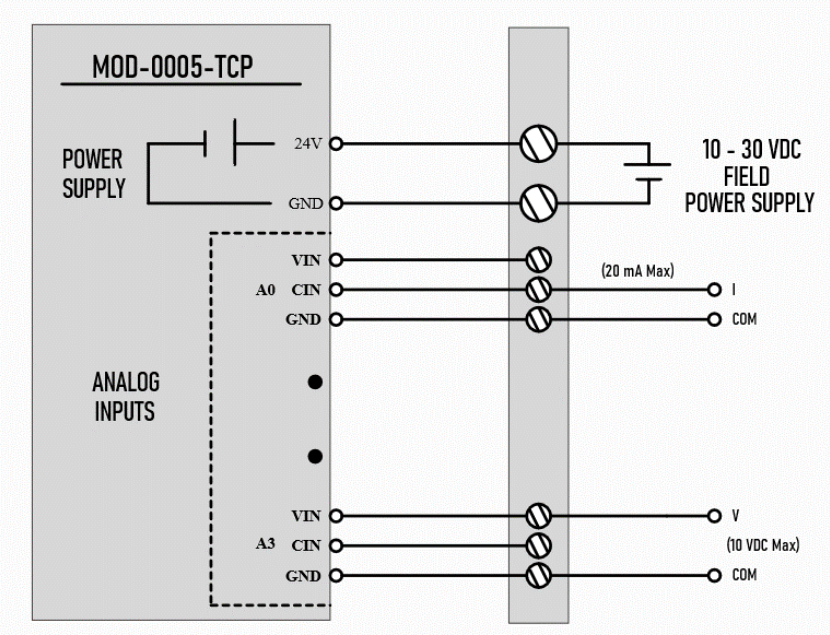
MANUAL FOR MOD-0005-TCP Rev. A

▪ TECHNICAL SPECIFICATIONS

Network Specifications	
Network interface	Ethernet 10/100Base-T
Protocol	Modbus TCP
Analog Inputs	
Channels	4
Input Current (Max)	20mA
Input Voltage (Max)	10V
Accuracy	
Current Offset Error	± 20uA
Voltage Offset Error	± 10mV
Thermal Drift	12 ppm/°C
Power Supply	
Power Supply Voltage	10-30VDC
Current Consumption	350mA

▪ WIRING DIAGRAMS



MODBUS REGISTERS

MODBUS REGISTERS			
REGISTER	DECIMAL	DESCRIPTION	ACCESS
0x2710	10000	Node ID	RO
0x2711	10001	Power UP	RO
0x2712	10002	Analog Input 0 Type	R/W
0x2713	10003	Analog Input 1 Type	R/W
0x2714	10004	Analog Input 2 Type	R/W
0x2715	10005	Analog Input 3 Type	R/W
0x2716	10006	Analog Input 0 Value	R
0x2717	10007	Analog Input 1 Value	R
0x2718	10008	Analog Input 2 Value	R
0x2719	10009	Analog Input 3 Value	R

- 10000: Node ID :

Contains the Modbus address of the device.

- 10001: Power Up Status:

When this register is set to 2 the inputs of this device are set to current mode, when set to 1 (Default) the inputs are set to voltage mode.

- 10002 - 10005 : Analog Inputs Type:

This register allows change the analog input type (Current mode or voltage mode) of the respective channel.

- 100006 - 10009: Analog Inputs Values:

This register store the current value of each respective inputs.

- Supported modbus functions:

Read Holding Register – 0x03
Write Single Register – 0x06

WEB SERVER

This device includes a web server in order to check or modify the status of its inputs and outputs.

The web server also allows the user to modify the network settings required for the device communication.
The default Network configurations are as follows:

- IP Address: 192.168.100.10
- Modbus Address: 1
- By default the device has the DHCP enabled, this means that if available the IP Adddress is given by the DHCP server.

MODBUS REGISTERS DESCRIPTION

- 10002: **Analog Input Type 0**
- 10003: **Analog Input Type 1**
- 10004: **Analog Input Type 2**
- 10005: **Analog Input Type 3**

Change the input type the cannel to "current mode" or "voltage mode" see values table.

Output Type		
TYPE	VALUE(HEX)	VALUE(DEC)
Voltage	0x00	1
Current	0x01	2

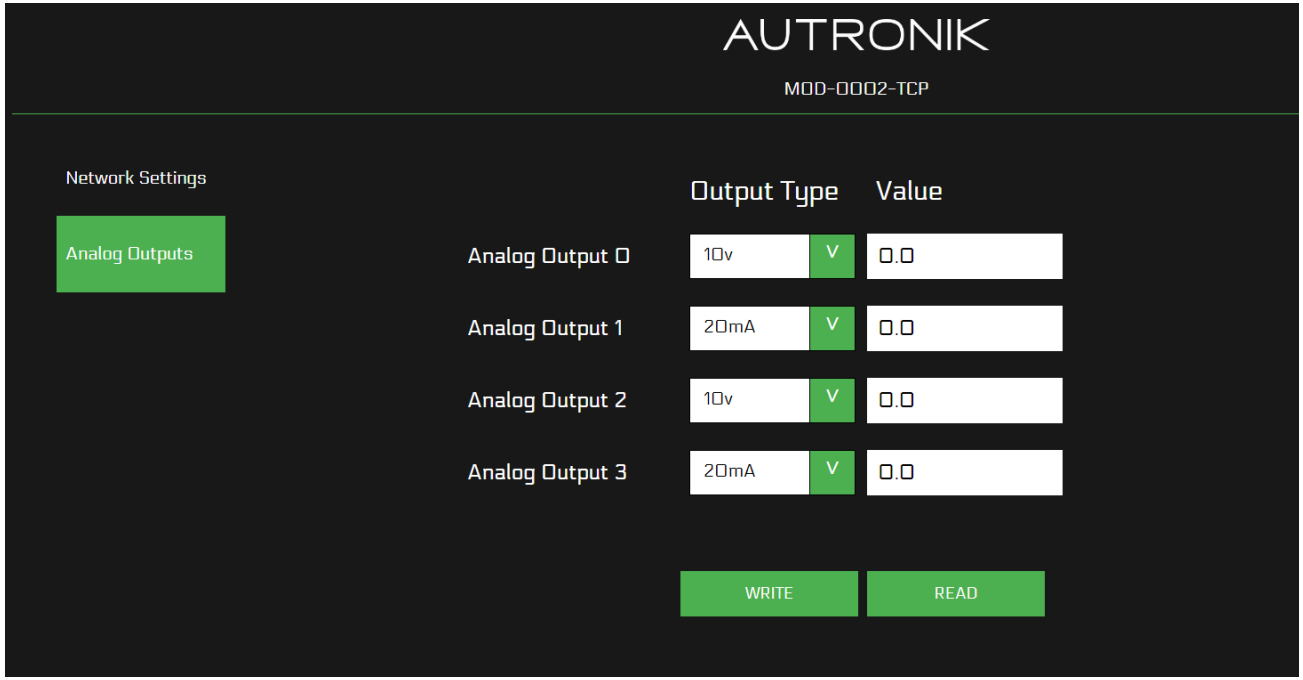
- 10006: **Analog Input Value 0**
- 10007: **Analog Input Value 1**
- 10008: **Analog Input Value 2**
- 10009: **Analog Input Value 3**

Change the Value of each analog output value.
The value of input current in the register is in uA: 20,000 = 20mA
The value of input voltage in the register is in mV: 10,000 = 10V

Output Value		
VALUE	REGISTER VALUE(HEX)	REGISTER DECIMAL
5V	0x1388	5000
2.5mA	0x09C4	2500

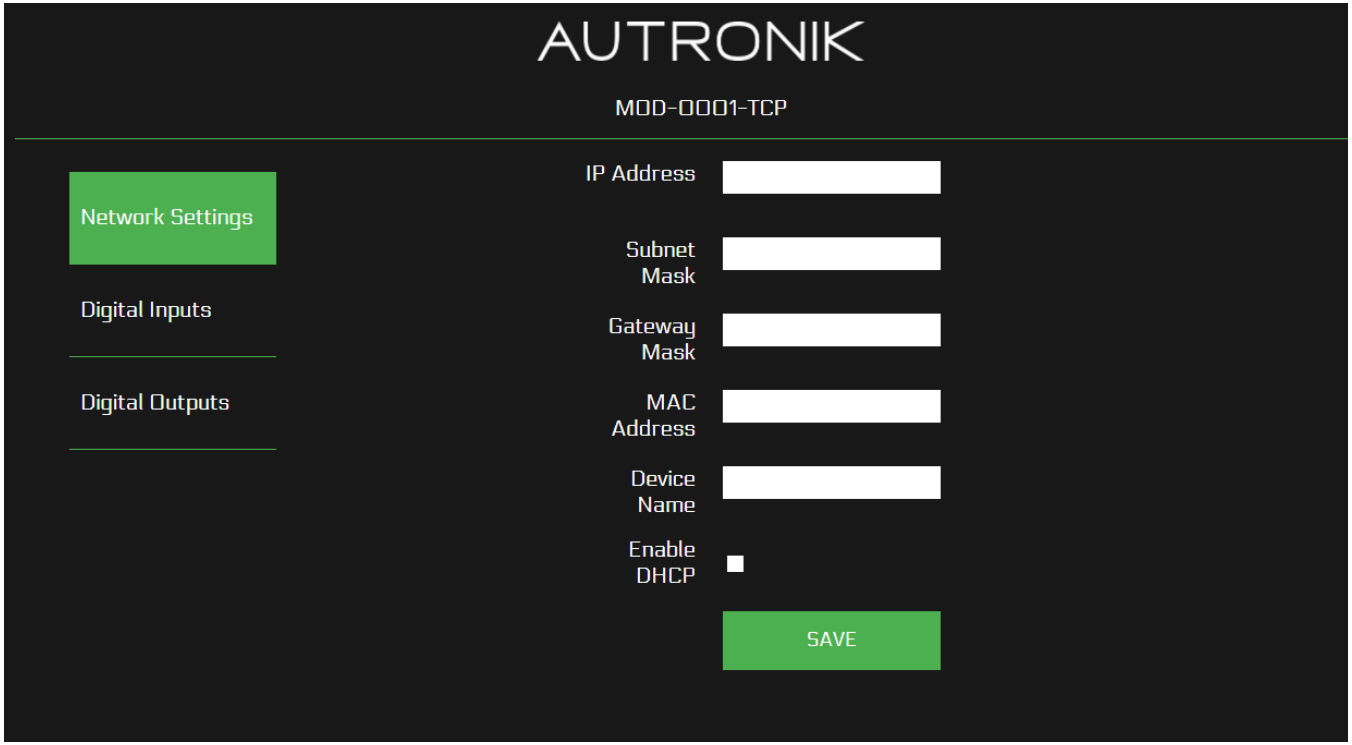
▪ WEB SERVER: ANALOG INPUTS

The analog inputs page allows the user to read and modify the “Type” and “Value” of each Analog output channel.



▪ WEB SERVER: NETWORK SETTINGS

The network settings page allows the user to modify the communications configuration for the device. In order to modify a setting the user needs to modify the corresponding setting and then click on the “SAVE” button(The web browser may need to be restarted in order for the changes to apply.



MECHANICAL DIMENSIONS