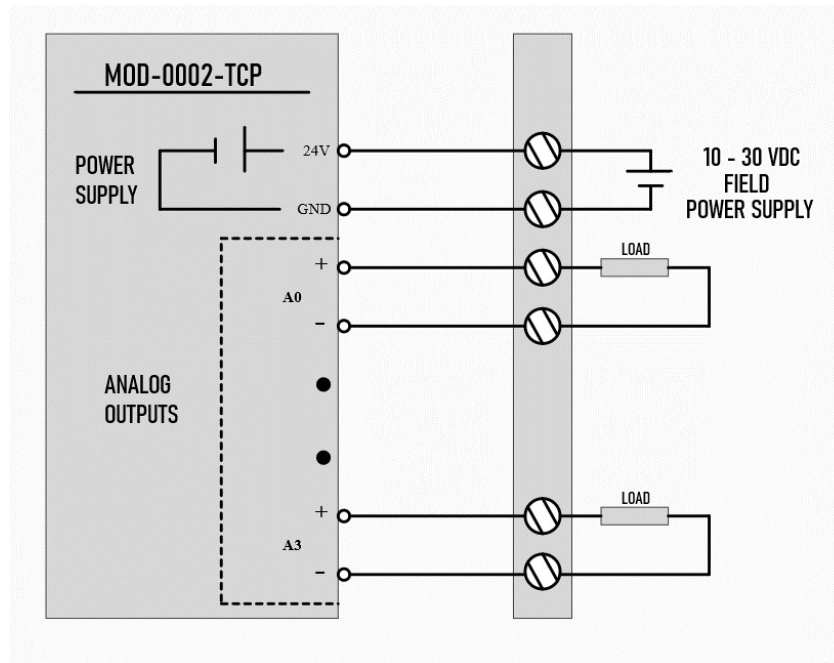


**MANUAL FOR
MOD-TCP-002
Rev. A**

■ TECHNICAL SPECIFICATIONS

Network Specifications	
Network interface	Ethernet 10/100Base-T
Protocol	Modbus TCP
Analog Outputs	
Channels	4
Output Current (Max)	20mA
Output Voltage (Max)	10V
Accuracy	
Current Offset Error	$\pm 20\mu\text{A}$
Voltage Offset Error	$\pm 10\text{mV}$
Thermal Drift	$\pm 10 \mu\text{V}/^\circ\text{C}$
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 Output 0 Type	R/W
0x2713	10003	Analog Output 1 Type	R/W
0x2714	10004	Analog Output 2 Type	R/W
0x2715	10005	Analog Output 3 Type	R/W
0x2716	10006	Analog Output 0 Value	R/W
0x2717	10007	Analog Output 1 Value	R/W
0x2718	10008	Analog Output 2 Value	R/W
0x2719	10009	Analog Output 3 Value	R/W

- 10000: Node ID :
Contains the Modbus address of the device.
- 10001: Power Up Status:
When this register is set to 1 the outputs of this device are closed at power up, when set to 0 (Default) the outputs are open.
- 10002 - 10005 : Analog Outputs Type:
This register allows change the analog output type (Current mode or voltage mode) of the respective channel.
- 10006 - 10009: Analog Outputs Values:
This register allows to set the analog output value of the respective channel.
- 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: 192.168.1.100
- Modbus Address: 1
- By default the device has the DHCP enabled, this means that if available the IP Address is given by the DHCP server.

■ MODBUS REGISTERS DESCRIPTION

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

Change the output type the output to “current mode” or “voltage mode”
see values table.

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

Change the Value of each analog output value.

The value of output current in the register is in μA : 20,000 = 20mA

The value of output voltage in the register is in mV: 10,000 = 10V

Output Type		
TYPE	VALUE(HEX)	VALUE(DEC)
10V	0x00	0
20mA	0x01	1

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

■ WEB SERVER: ANALOG OUTPUTS

The analog outputs page allows the user to modify the “Type” and “Value” of each Analog output channel. When the page loads for the first time the current values of each channel are shown on the web page, also when clicking on the “Read” button the web page will show the current values. In order to change the values of each channel clicking the “Write” button will send this values to the controller.

AUTRONIK
MOD-0002-TCP

Network Settings

Analog Outputs

	Output Type		Value
Analog Output 0	10v	V	0.0
Analog Output 1	20mA	V	0.0
Analog Output 2	10v	V	0.0
Analog Output 3	20mA	V	0.0

WRITE

READ

▪ WEB SERVER: NETWORK SETTINGS

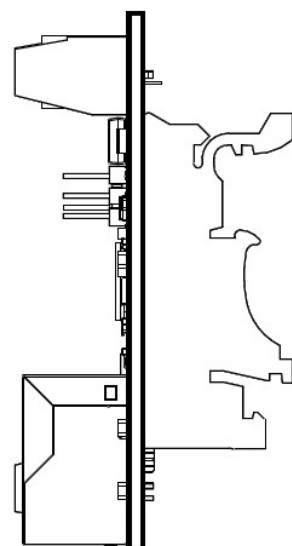
The network settings page allows the user to modify the communications configuration for the device. In order to modify a setting the user needs to modify the corresponding setting and then click on the “SAVE” button(The web browser may need to be restarted in order for the changes to apply).

The screenshot displays the AUTRONIK MOD-0001-TCP web interface. At the top, the brand name 'AUTRONIK' and model 'MOD-0001-TCP' are shown. A left-hand navigation menu contains three items: 'Network Settings' (highlighted in blue), 'Digital Inputs', and 'Digital Outputs'. The main content area is titled 'Network Settings' and contains the following configuration fields:

- IP Address: A text input field.
- Subnet Mask: A text input field.
- Gateway Mask: A text input field.
- MAC Address: A text input field.
- Device Name: A text input field.
- Enable DHCP: A checkbox, currently unchecked.

A blue 'SAVE' button is positioned at the bottom right of the configuration area.

MECHANICAL DIMENSIONS



UNIVERSAL DIN RAIL
MOUNTING

