

PT100 MODBUS TEMPERATURE HEAD TRANSMITTER THM501



INSTALLATION GUIDE

IG_INHD_THM501_E02A

 TEKON ELECTRONICS | AVEIRO, PORTUGAL

 P.: +351 234 303 320
 M.: +351 933 033 250
 E.: sales@tekonelectronics.com

TEKONELECTRONICS.COM

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INSTALLATION GUIDE

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step **01**

01

CONNECT AND CONFIGURE THM501 TEMPERATURE HEAD TRANSMITTER

DOWNLOAD AND INSTALL "TEKON CONFIGURATOR" FREE SOFTWARE FROM TEKON ELECTRONICS WEBSITE



step CONNECT AND CONFIGURE THM501 TEMPERATURE HEAD TRANSMITTER 04 Open the THM501 device page. You can enter the device's page in the following ways: 1st option: Click on "WIRED TRANSMITTERS" in the left menu and then click on the device. TEKON CO Quick, easy and sm TEKON CONFIGURATOR Quick, easy and smart configuration Transmitters DEVICES DEVICES TDU301-1 TOUSO2-1 TH-F101 TH-F102-1 TH-F102-1 0 For you to get the most out of our portfolio quickly and easily. Configure a complete project with just a few entries. Search the product by typing the name. THMS021 SMART SENSORS SMART SEN 2nd option: Type the name of the device in the "Search Device" field on the home page and select. Tekon Configurator o × TEKON CONFIGURATOR Quick, easy and smart configuration rekun DEVICES For you to get the most out of our portfolio quickly and easily. SMART TRANSMITTERS Configure a complete project with just a few entries. Search the product by typing the name. SMART SENSORS тнмзо



step 0

CONNECT AND CONFIGURE THM501 TEMPERATURE HEAD TRANSMITTER

05	Load the	"Port COM"	corresponding to the THM	501
				TEKON CONFIGURATOR Quick, easy and smart configuration
		DEVICES	Wired Transmitters > Transmitters > THM501	
		SMART TRANSMITTERS	THM501 B	(Disconnected ())
		SMART SENSORS	Port COH Select CON V COR4 COR4 COR6	C Hodbus Hode
		WIRED TRANSMITTERS	CON25 Sensor Fype Temperature Unit Colous	
			Temperature MadbuckAdness 1 Baudrate (bps) 4800 Parity None	
			Stophits (2 V	
		Tekon Configurator v1.0		

If the USB cable has already been connected before opening the device page, "Port COM" will appear in the list, otherwise you need to click on the "🖅" button.

06	Select corr	esponding Port (COM ² .	
		Tekon Configurator		- 🗆 X
				TEKON CONFIGURATOR Quick, easy and smart configuration
		DEVICES	# Wired Transmitters $>$ Transmitters $>$ THM501	
		DEVICES	тнм501 🗈	
		SMART TRANSMITTERS		Disconnected ()
		Ċ	Port COM (COM26) 3	U Modbus Node
		SMART SENSORS	Transmitter Description	
		WIRED TRANSMITTERS	Sensor Type PT100 2 wires *	
			Temperature Modbus Address	
			Baudrate (bpc) 4800 V Parity None V Stophits 2 V	
		Tekon Configurator v1.0		Ø WRITE DEVICE

² You can check device's serial port name in "Device Manager" on Microsoft [®] Windows[®] operating system.



step

O1 CONNECT AND CONFIGURE THM501 TEMPERATURE HEAD TRANSMITTER

07	Click on <i>Connect</i> (💩) button.
	Construction Construction <p< th=""></p<>
A	NOTE: You have a 10 seconds window to entry in configuration mode after conect the power plug.
08	The software will connect to the device.
	NOTE: If the software is unable to connect to the device, the <u>correction Falled</u> status is displayed. If it hasn't connected, go back to the previous steps and check the port COM.

09

In configuration mode you can set Transmiter Description, Sensor Type, Temperature Unit, Modbus Address, Baudrate(bps) and Parity.

To save the values click on "WRITE DEVICE".



NOTE:

The "WRITE DEVICE" button will only be active when there is a change to one of the editable fields, if there is no change it will be disabled.

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Click on the button (()) to exit *configuration mode* and return the device to normal operating mode.

		Quick, easy and smart configuration
DEVICES	Wired Transmitters > Transmitters > THM501	
SMART TRANSMITTERS	Port CON	
SMART SENSORS	Transmitter Description TekonElec	Hodbus Hod
WIRED TRANSMITTERS	Sensor Type PT100 2 wires Temperature Unit Celsius	
	Temperature -273.15 Nodbus Address 6 Baudrate (bps) 19200	≩ ₹
	Party Rone	
Tekon Configurator v1.0		





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Check that the settings for: Modbus Address, Baudrate and Parity, are the same as those defined in configuration mode. To conect click on (1)



Performance a power cycle, disconnecting the power plug and connecting again. You have a 10 secons window to entry in configuration mode.



O1 CONNECT AND CONFIGURE THM501 TEMPERATURE HEAD TRANSMITTER

13	When the software connect	is to the device, the " <i>Connected</i> " message will be displayed.
		TEKON CONFIGURATOR Quick, easy and smart configuration
	DEVICES	Wired Transmitters > Transmitters > THM501 THM501 Firmware Version: 1.3.514 Hardware Version: 0.0 Connected ©
	SMART TRANSMITTERS	Scan Time (s) Part COH 1 • COM0.4 • C Hodsus Address Baudrate Parity C C 6 • 132200 • None • C
	WIRED TRANSMITTERS	Transmitter Description TekonElec Sensor Type FT100.2 wires I Temperature Temperature 4273.15
	Tekon Configurator v1.0	A SING DATA
	NOTE: If the software is unable to connected, go back to the	connect to the device, the <u>connecton Falled</u> status is displayed. If it hasn't previous steps and check the port COM.

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Read the temperature value using the Modbus protocol. The value of temperature is 32-bit format and is available in register 23 accessed through the Read Holding Registers function (FC = 03).

	Quide Wired Transmitters > Transmitters > THM501	TEKON CONFIGURATOR
SMART TRANSMITTERS	Firmware Version: 1.3.514 Hardware Version: 0.0 Scan Time (o) POINT 1 0 CON	
SMART SENSORS	Hodbus Address Basdrate Parity (6) 19200 None None Transmitter Description TelsoElec	Modbus Hode
	Sensor Type IP100 2 mires V E Temperature Unit Celsus V Temperature -273.15	
Tekon Configurator v1.0		ل SEND DATA





CONNECT AND CONFIGURE THM501 TEMPERATURE HEAD TRANSMITTER

MODBUS TABLE (HOLDING REGISTERS)				
Description	Address	Туре	Values	
Acquisition mode configuration	15	UINT16	3 - PT100 2W 4 - PT100 3W 5 - PT100 4W	
Temperature format configuration	18	UINT16	1 - °C 2 - °F 3 - K	
Temperature value	23	DOUBLE32 (CD AB)		

TEKON ELECTRONICS

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Quinta do Simão 3800-230 Aveiro PORTUGAL

P.: +351 234 303 320 M.: +351 933 033 250 E.: sales@tekonelectronics.com