



INSTALLATION GUIDE

IG_DINR_TDU301-I_E02A

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UNIVERSAL TEMPERATURE ISOLATED DIN RAL TRANSMITTER TDU301-I

INSTALLATION GUIDE



CONNECT AND CONFIGURE TDU301-I UNIVERSAL TEMPERATURE ISOLATED DIN RAIL TRANSMITTER

Pages 3 to 11



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01

: 3

CONNECT AND CONFIGURE TDU301-I UNIV. TEMP. ISOLATED DIN RAIL TRANSMITTER

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

	Connect the TDU301-I transmitter to the Micro-USB cable.	
02	Connect a Thermocouple or PT100 sensor to the TDU301-I transmitter. Note: in this example, we will use a thermocouple.	Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Сожат Соскосто со
03	Connect the USB cable to the computer.	
04	Open Tekon Configurator software.	









06	Load the "Port COM" c	orresponding to the TDU301-I.
		Execution of the set of the s
	NOTE: If the USB cable has already otherwise you need to click	been connected before opening the device page, "Port COM" will appear in the list, on the "©" button.
07	Select corresponding Port Cl	JM ² .

DEVICES Wred Transmitters > TDU301-1 Image: SMART TRANSMITTERS Image: SMART SENSORS Image:
SMART TRANSMITTERS SMART SENSORS Input Configurations Transmitter Description Sensor Type Imput Configurations Imput Configurations Transmitter Description Imput Configurations Imput Configurations <
SMART SENSORS WIRED TRANSMITTERS WIRED TRANSMITTERS UNDED TRANSMITTERS UNDET TRANS
WIRED TRANSMITTERS
Output Configurations Hin, Current (mA) A Bac, Current (mA) Bac, Current (mA) Current Offset (uA) Output Limits Lower Limit (mA) B Current Imax (mA) Current (mA) Current Imax (mA) Current Ima
Lower Limit (mA) Upper Limit (mA) 3.8 ⊕ (20.5 ⊕
Error Limits - Synaming Current (mA) 3.2
Tekon Configurator v1.0

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



step



08	Click on <i>Connect</i> (🕘) butt	on.
	DEVICES Image: Constraint of the second of the se	Image: constraint: Image: constraint:
09	The software will connect to	the device
05		

If the software is unable to connect to the device, the

Connection Failed ()

vice, the status is displayed. If it hasn't

connected, go back to the previous steps and check the port COM.





10 When the software connects to the device, the "Connected" message will be displayed. Tekon Configurato o x TEKON CONFIGURATOR Quick, easy and smart configuration rek<mark>u</mark>n \odot A Wired Transmitters > Transmitters > TDU301-I DEVICES TDU301-I Serial Number: 1502240001 Firmware Version: 3.1.0 Hardware Version: 1.0.0 SMART TRANSMITTERS Port COM COM34 V C SMART SENSORS Input Configurations Transmitter Description TekOnElectronics
 Sensor Type
 Number of Wires

 PT100
 *
 3 Wires
 *
 WIRED TRANSMITTERS
 Min. Temperature
 Max. Temperature

 -200
 \$
 Temperature (°C) 65535 Output Configurations Output Limits
 Lower Limit (mA)
 Upper Limit (mA)

 3.8
 \$
 Error Limits Signaling Current (mA)





step

CONNECT AND CONFIGURE TDU301-I UNIV. TEMP. ISOLATED DIN RAIL TRANSMITTER

12	Choose	wich type sensor	(PT100, PT500, PT1000 or Thermocouple) you want to in Sensor Type select.
		Tekon Configurator	- D X
			TEKON CONFIGURATOR Quick, easy and smart configuration
		DEVICES	Wired Transmitters > Transmitters > TOU3014
		SMART TRANSMITTERS	Performed reasons 3.1.3 Performer Version: 1.0.0 Perf COM CORPS4 V ©
		SMART SENSORS	Input Configurations Transmitter Description TelonElectronics
		WIRED TRANSMITTERS	Fensor Type Number of Wires 3 Wres 3 Wres 9 T100 3 Wres 9 T100 9 T100 1 Thermocopie K 1 Thermocopie K Thermocopie K 20 Thermocopie K 0 Thermocopie K 0
			Signaling Current (mA) 3.2 READ VALUES

13

To change the selected sensor settings, update the value of the desire parameter and select the "Write Device" option.

In this example, we use the thermocouple K and change the "Temperature Min." to -100 and "Temperature Max." to 100.

		TEKON CONFIGURATOR Quick, easy and smart configuration
DEVICES	₩Wred Transmitters > Transmitters > T0U3014 TDU301-1 B Serial Number: 1502240001	
SMART TRANSMITTERS	Firmware Version: 3.1.0 Hardware Version: 1.0.0	
SMART SENSORS	COURI V Configurations	U
WIRED TRANSMITTERS	Transmitter Description reloftEdenocogie Tenemocogie K * file. Temperature +100 ψ 100 ψ	Temperature (*C) (65535
	Output Configurations Has. Current (mA) Current Offset (uA) 4 0 0 0 Output Limite 0 0 0	
	Curver Limits (mA) Upper Limit (mA) 38 \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	
Tekon Configurator v1.0	Solution Contract (BAC) (3.2	

While the settings are being written, the following icon will be displayed next to the "WRITE DEVICE" button ()

If the changes to the device have been written, the following symbol will appear (
)

If not, the following symbol will appear (X),try again and check that the device is connected correctly.

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.







15

If the temperature reading is outside the set temperature range, the transmitter TDU301-I red and blue led will blink simultaneously.





step 01	CONNECT	T AND CONFIG	URE TDU301-1 UNIV. TEMP. ISO	OLATED DIN RAIL TRANSMITTER	
16	In Output Co - "Current O - "Signaling damaged).	onfigurations you ffset (uA)": value ; Current (mA)": c	a can set "Current Offset (uA)" and in add to the output current, to perfor urrent set to alert for sensor proble	Error Limits you can set "Signaling Current (mA)": m an offset. ms (open circuit, no sersor connected or sensor	•
		Tekon Configurator		- 🗆 ×	
				TEKON CONFIGURATOR Quick, easy and smart configuration	
		DEVICES	Wired Transmitters > TDU3014 TOU3014 TOU3014 TOU3014 B Series 3.10 Hardware Version: 1.00 Hardware Version: 1.00	Connector @	
		SMART SENSORS	Port CON CORDA ©	٥	
		WIRED TRANSMITTERS	Tel:NotRetention Sensor Type Thermcoolige K His. Temperature 100 ⊕	Temperature (%) 22.42	
		Tekon Configurator v1.0	Output Configurations Hin. Current (mA) 4 0 Haz. Current (mA) 5 0 Udput Limits Lower Limit (mA) 3 8 0 Upper Limit (mA) 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		

17

Edit the fields and click on "Write Device" to save the changes. To return to the previous software window, click on the "Basic Options" tab.

		TEKON CONFIGURATOR Quick, easy and smart configuration
DEVICES	Wtred Transmitters > TDU3014 TDU301-1 ■ Serial Nummer 1502240001 Firmware Version: 3.0.0 Hardware Version: 1.0.0	
SMART TRANSMITTERS	Part CON CODECT • 3	
SMART SENSORS	Input Configurations Transmitter Description TeloRisExerconcs Sensor Type	
WIRED TRANSMITTERS	Themscouple K Themscouple K Hin. Temperature 100 Res. Temperature 100	Temperature (°C) 23.42
	Output Computations Max. Current (mA) Current (mA) 4 4 20 0 1 0 Output Limits 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	Lover Limits 3.8 Q2.5 Q Error Limits Signaling Current (mA) 3.2 Q	
Tekon Configurator v1.0		

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SMART SENSORS

WIRED TRANSMITTERS

ekon Configurator v1.0

Input Configurations Transmitter Description TekOnElectronics Sensor Type Thermocouple K

Output Configurations
Min. Current (mA)
4
\$

Output Limits Lower Limit (mA)

Error Limits Signaling Current (mA) 3.2

 Min. Temperature
 Max. Temperature

 (-100
 \$

Z3.42



 Max. Current (mA)
 Current Offset (uA)

 20
 \$

Upper Limit (mA)20.5

TEKON ELECTRONICS

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