WIRELESS SENSORS TECHNOLOGY

VOLTAGE OUTPUT ISOLATED DIN RAIL TEMPERATURE TRANSMITTER TDU302-I

INSTALLATION GUIDE

IG_DINR_TDU302-I_E02A

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VOLTAGE OUTPUT ISOLATED DIN RAIL TEMPERATURE TRANSMITTER TDU302-I

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CONNECT AND CONFIGURE TDU302-I VOLTAGE OUTPUT ISOLATED DIN RAIL TEMPERATURE TRANSMITTER

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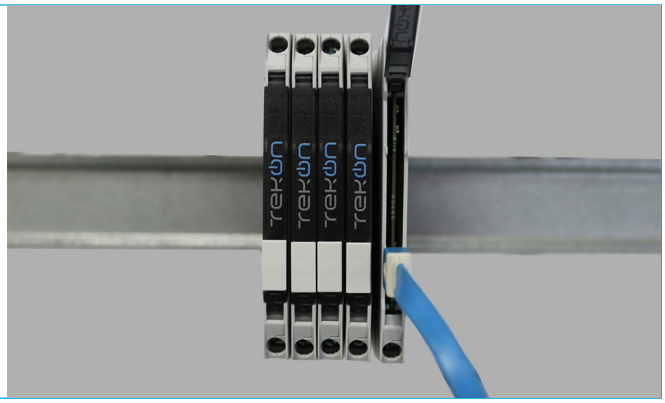
CONNECT AND CONFIGURE TDU302-I VOLTAGE OUTPUT ISOLAT. DIN RAIL TEMP. TRANSMITTER

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

01

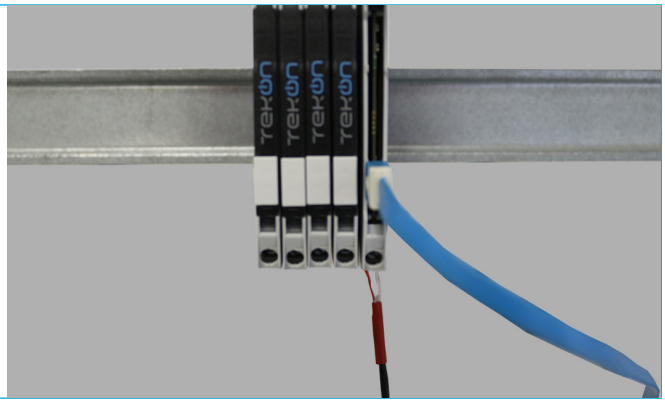
Connect the TDU302-I transmitter to the Micro-USB cable.



02

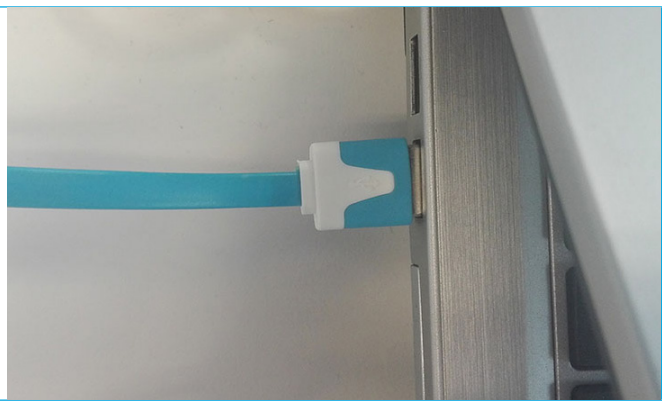
Connect a Thermocouple or PT100 sensor to the TDU302-I transmitter.

Note: in this example, we will use a thermocouple.



03

Connect the USB cable to the computer.



04

Open Tekon Configurator software.

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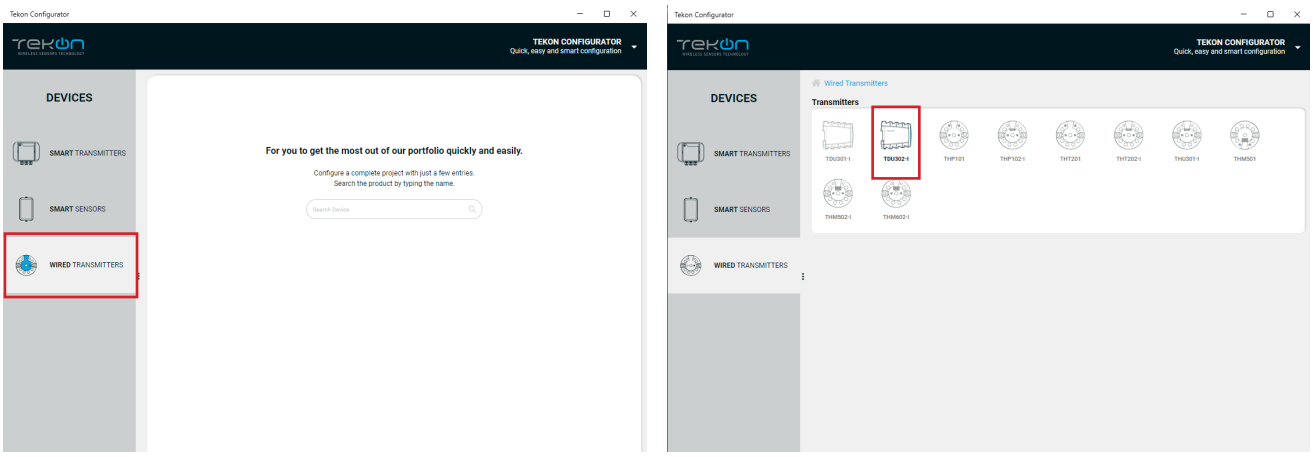
05

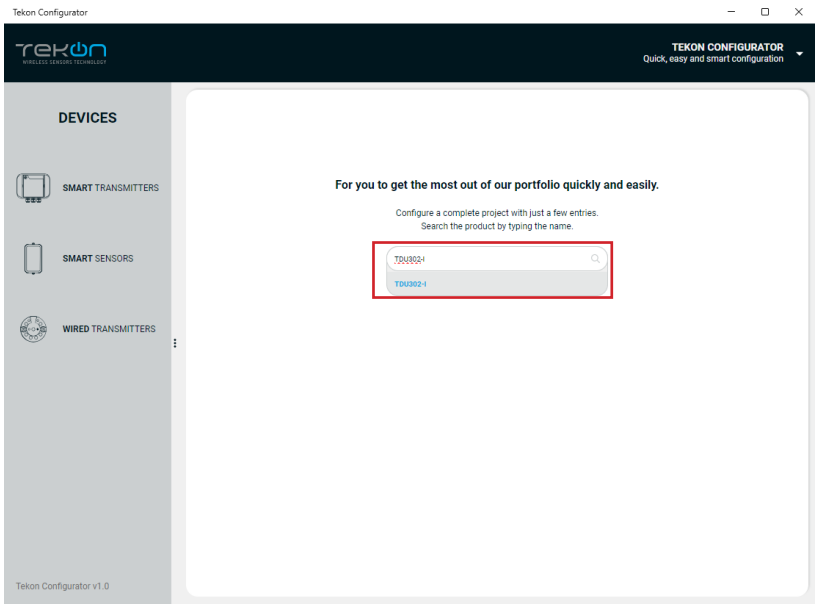
Open the TDU302-I device page.

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.



2nd option: Type the name of the device in the *"Search Device"* field on the home page and select.



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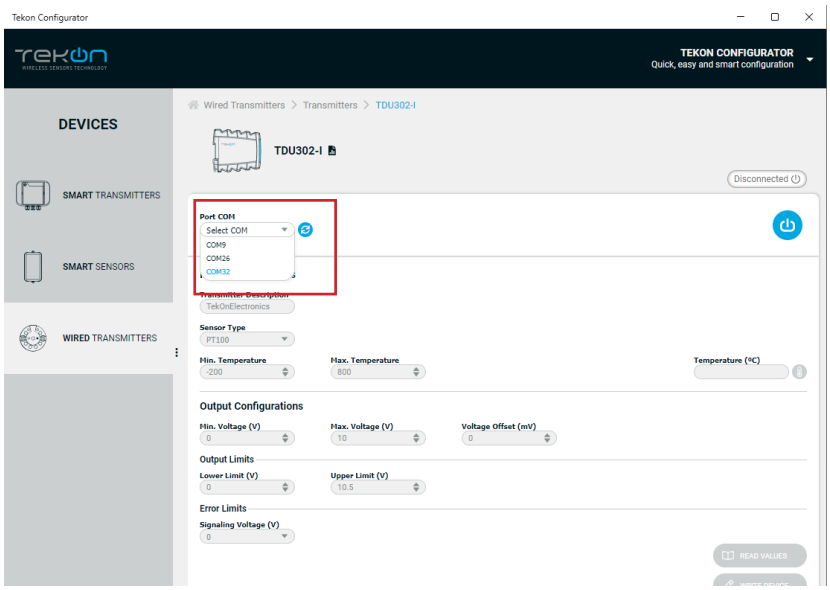
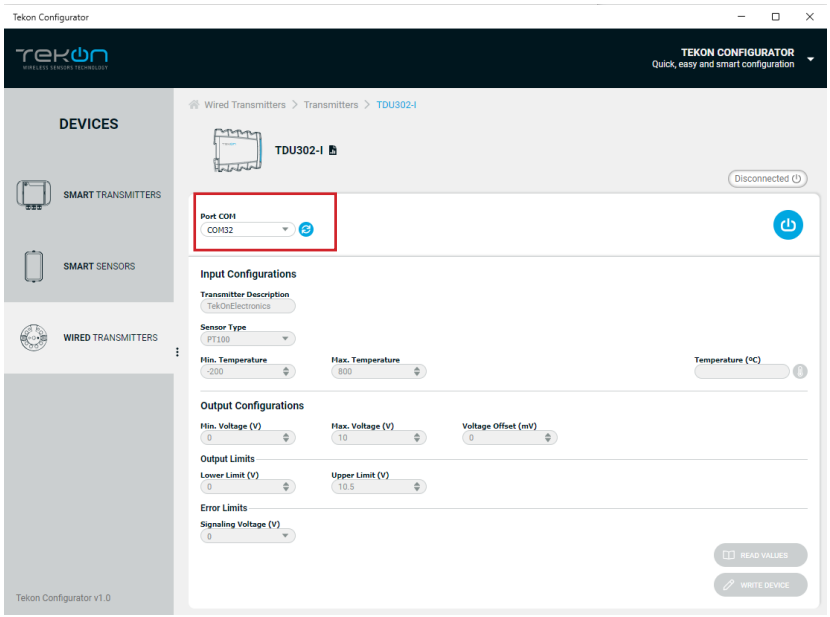
06 Load the “Port COM” corresponding to the TDU302-I.



NOTE:
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.

07 Select corresponding *Port COM*[2].



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

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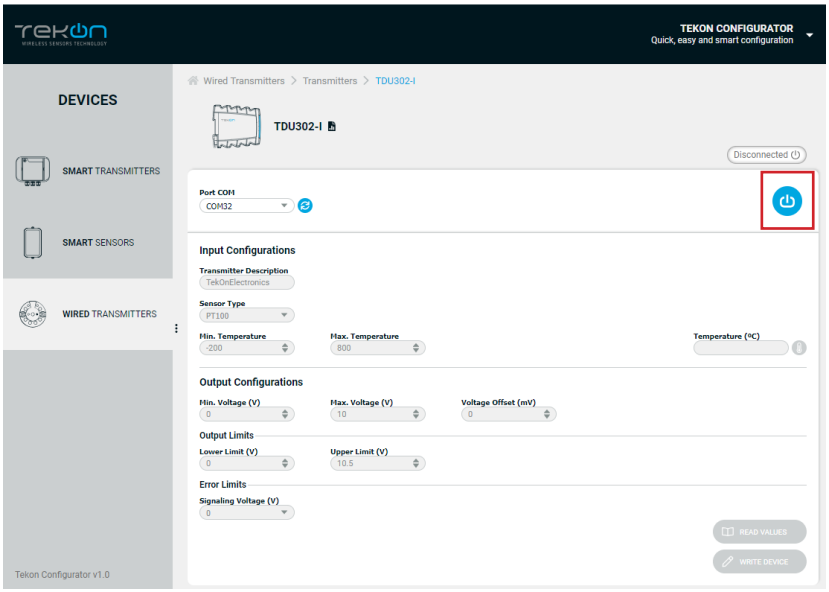
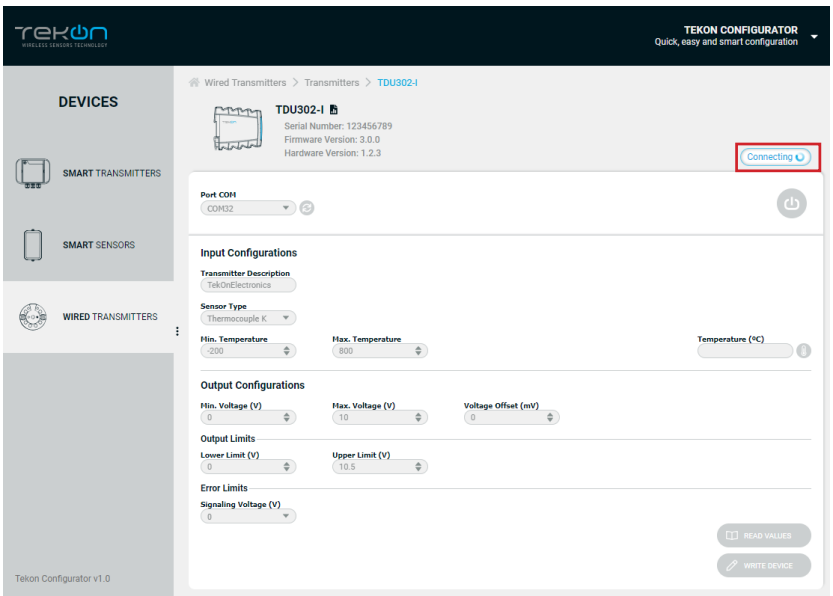
08

Click on *Connect* ( ) button to enter in configuration mode.



09

The software will connect to the device.



NOTE:
If the software is unable to connect to the device, the Connection Failed status is displayed. If it hasn't connected, go back to the previous steps and check the port COM.

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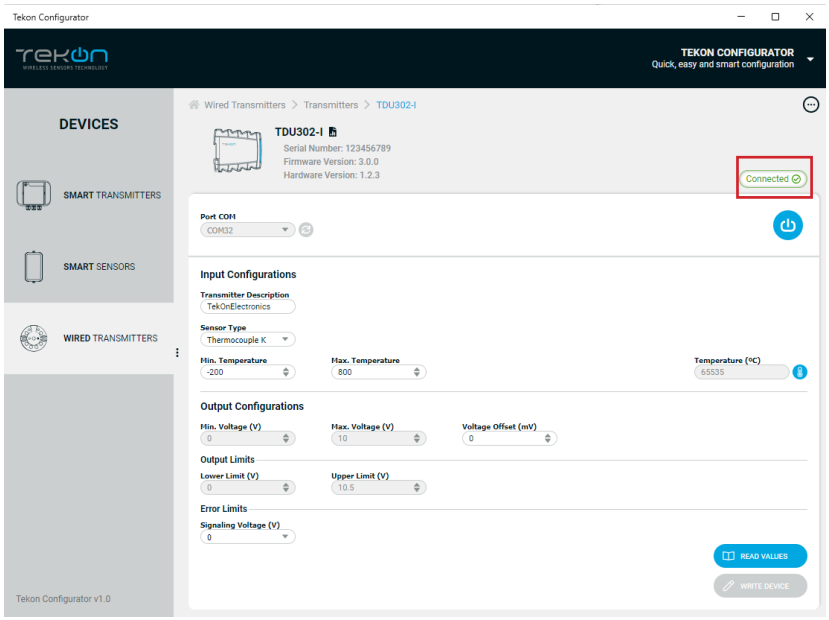
When the software connects to the device, the "*Connected*" message will be displayed.



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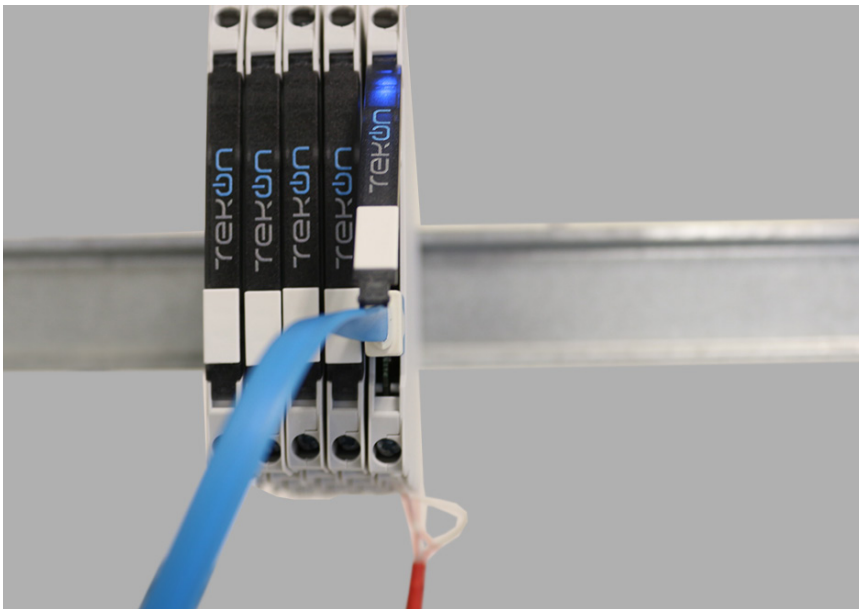
While the TDU302-I transmitter it is in configuration mode, the blue led will flash continuously.



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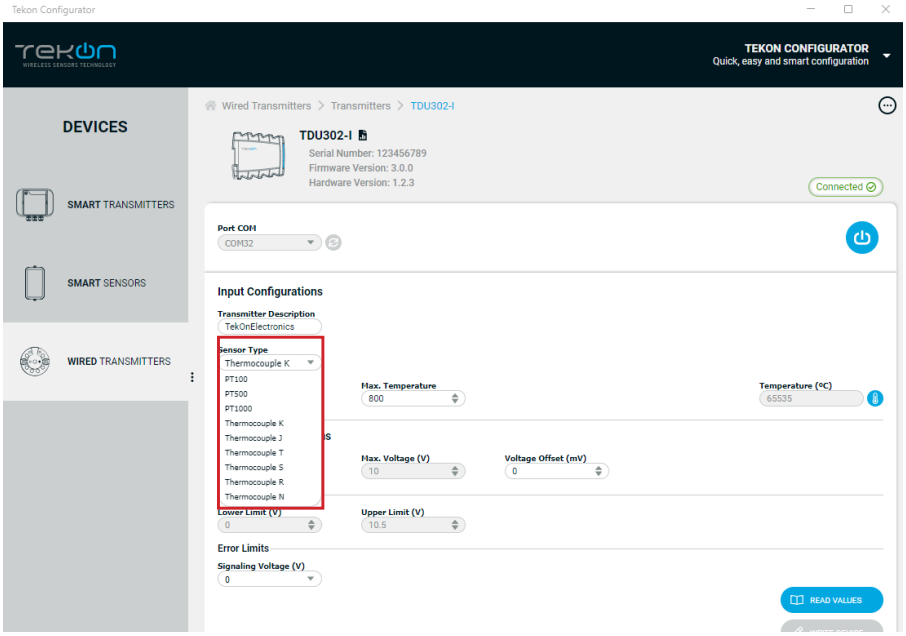
Choose wich type sensor (PT100, PT500, PT1000 or Thermocouple) you want to in Sensor Type select.



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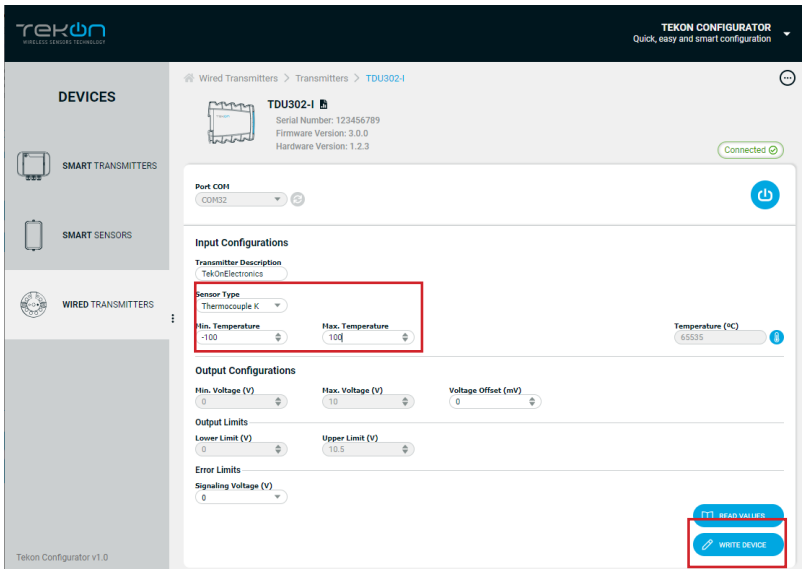
To change the selected sensor settings, update the value of the desire parameter and select the "Write Device" option.
In this example, we use the thermocouple K and change the "Temperature Min." to -100 and "Temperature Max." to 100.



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 ( ),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.

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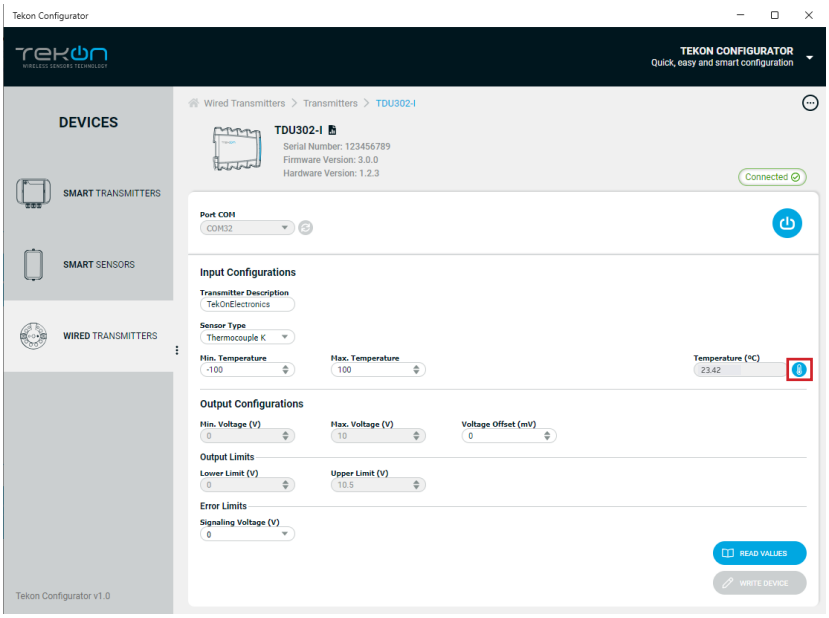
Click on to read the current temperature value.



Wait for the software to read the values from the device. Wait for the status to change to .

If the device reading fails appears. Make sure that all the steps have been carried out correctly.

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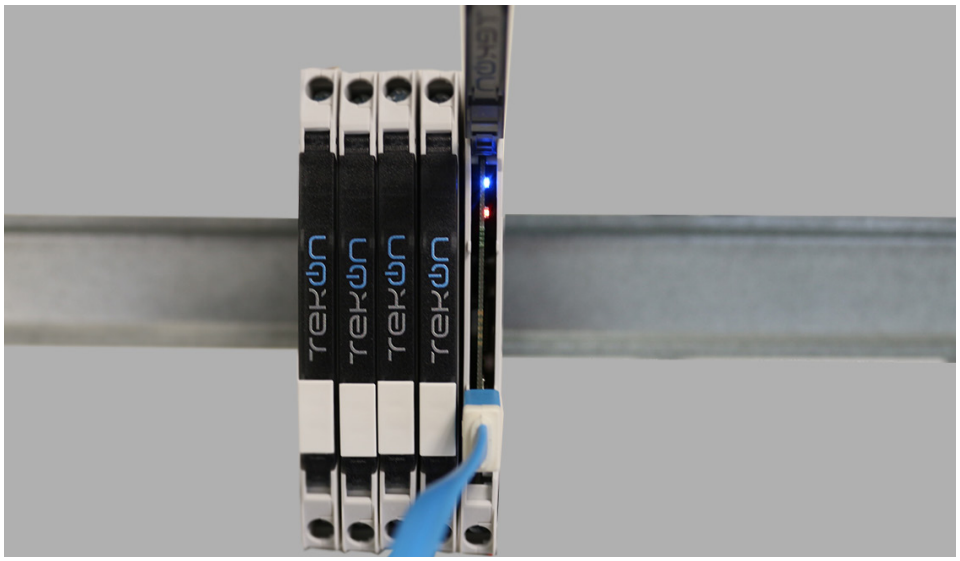
If the temperature reading is outside the set temperature range, the transmitter TDU302-I red and blue led will blink simultaneously.



Note: please review your settings and check the datasheet status led information to analyse all the led behaviours.

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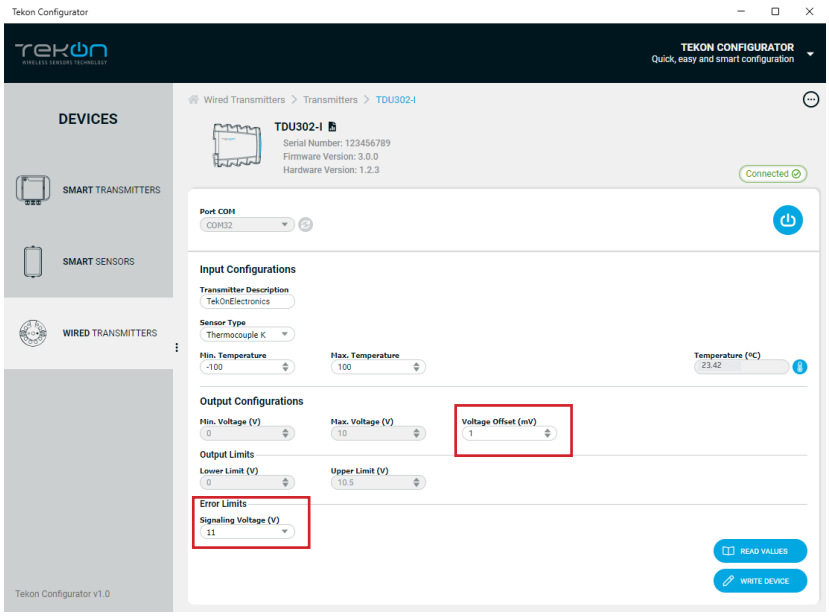
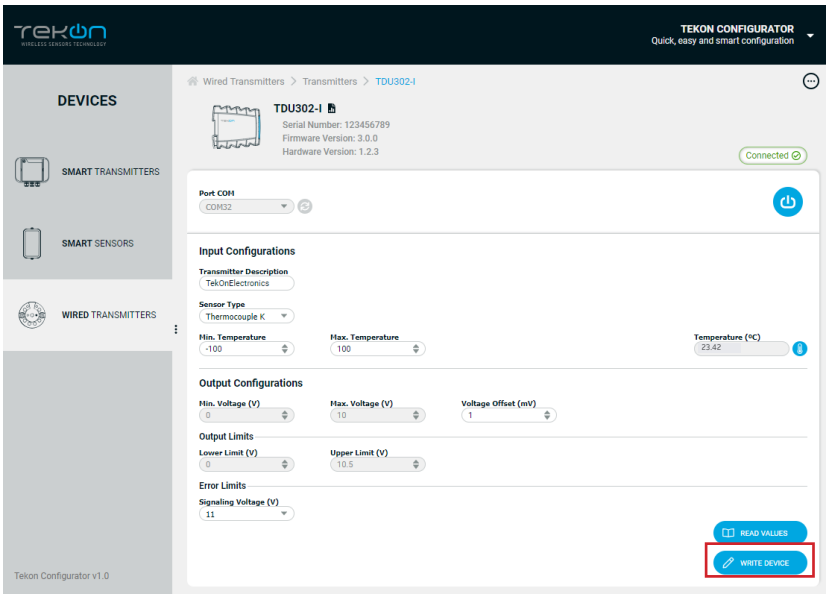
In Output Configurations you can set "Current Offset (uA)" and in Error Limits you can set "Signaling Current (mA)":
- "Voltage Offset (uA)": value add to the output Voltage, to perform an offset.
- "Signaling Current (mA)": Voltage set to alert for sensor problems (open circuit, no sersor connected or sensor damaged).



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.



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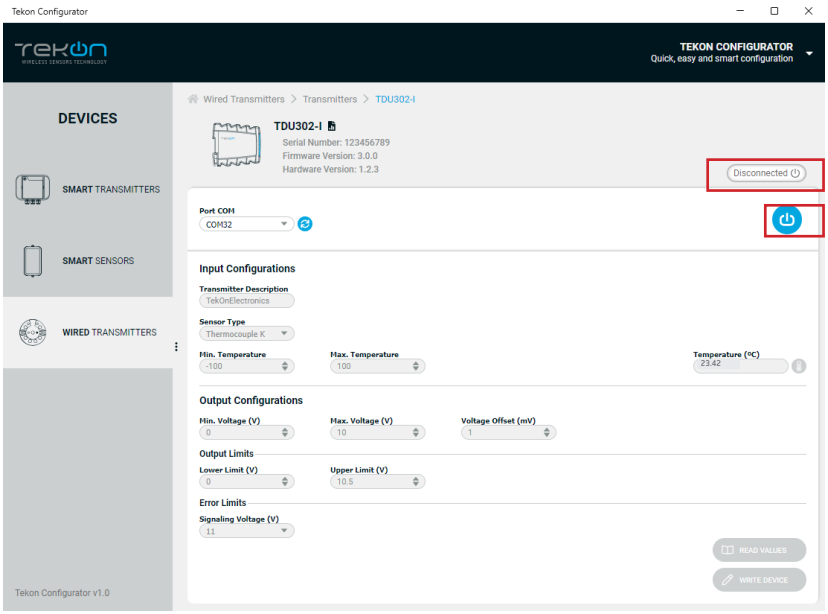
Click on the button (⏻) to exit *configuration mode* and return the device to normal operating mode.



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