WIRELESS SENSORS TECHNOLOGY

ONE WIRELESS SYSTEM
INSTALLATION GUIDE

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ONE WIRELESS SYSTEM
INSTALLATION GUIDE

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01
CONNECT AND CONFIGURE THE ONE WIRELESS GATEWAY

TEKON CONFIGURATOR SOFTWARE is only compatible with the Microsoft Windows Operating System.

01

Connect the antenna to the *Gateway*.

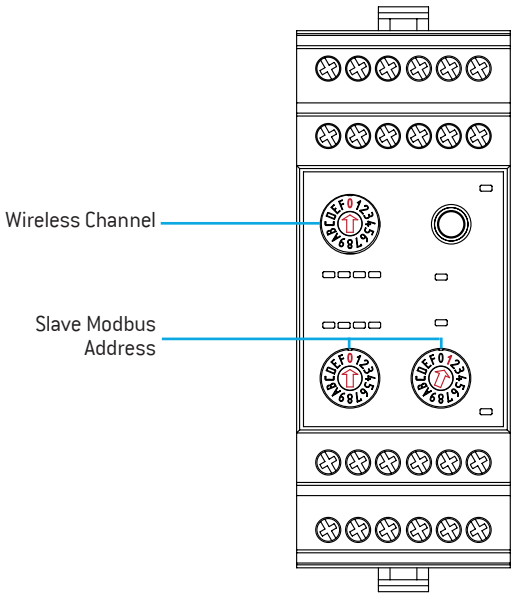
02

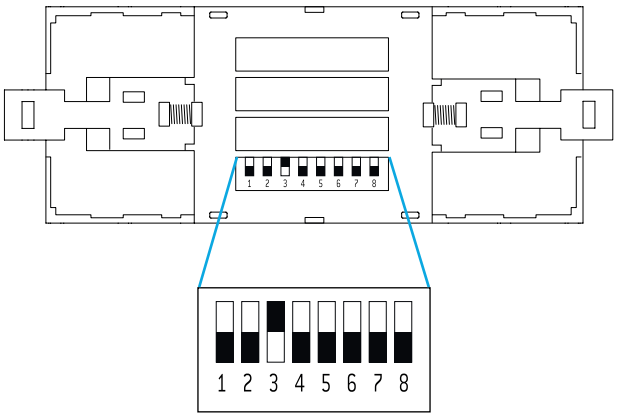
Wiring

Connect the power supply and then the *RS485-USB* cable to the gateway.

03

Make sure that the equipment is configured with the default configurations below (Wireless Channel and Slave Modbus Address).





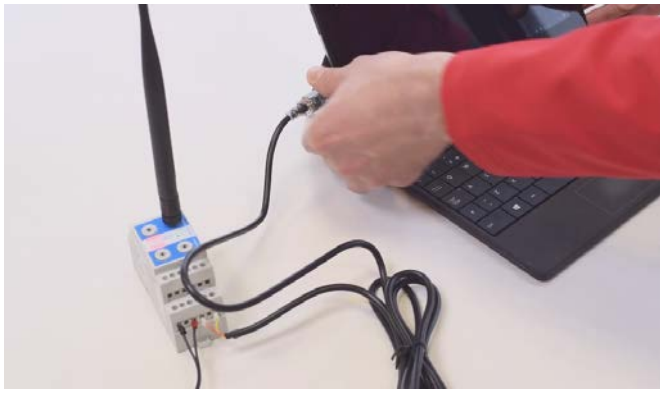
Default Device Parameters: *Wireless Channel [0], Gateway Modbus Slave Address [1], Baudrate [9600], Parity [None] and Stop Bits [2]*

step
01
CONNECT AND CONFIGURE THE ONE WIRELESS GATEWAY

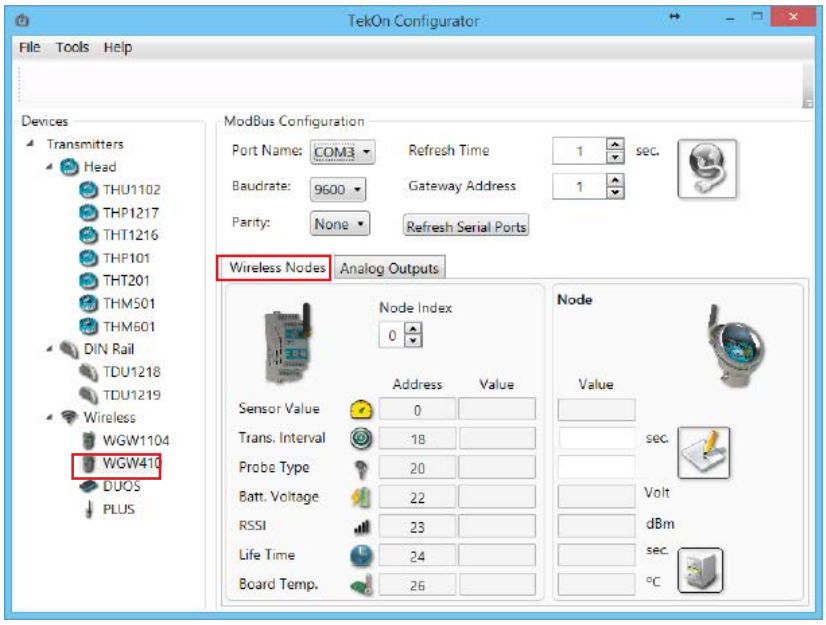
04 Power ON the device.

NOTE:
For other configurations please consult WGW410 Datasheet.
Configuration changes are assumed after powering ON the device. To change configurations, the device should be turned OFF and powered ON after.

05 Connect the *RS485-USB* cable to the computer.



06 Open *Tekon Configurator Software*[1] and select from the menu *WGW410* >> *Wireless Nodes*

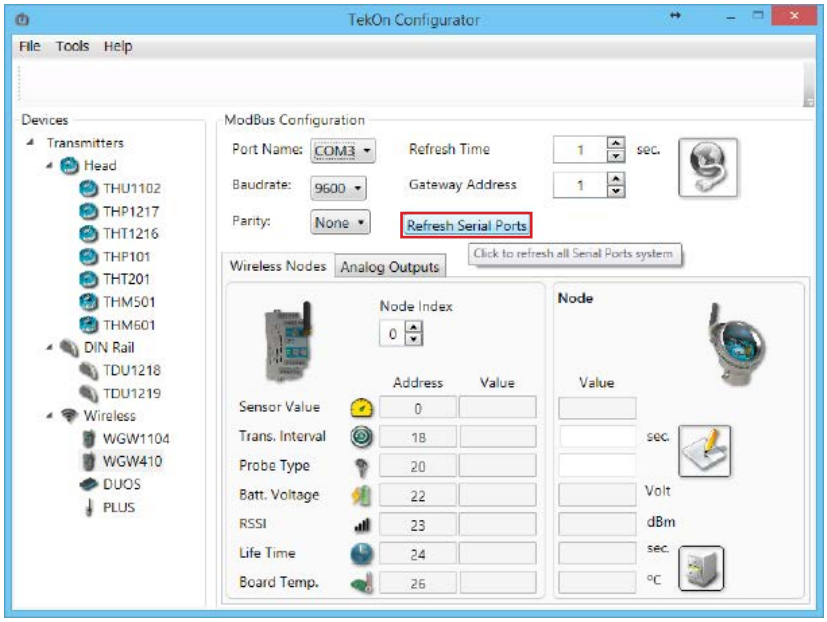


[1] Tekon Configurator software is free of charge and available at www.tekonelectronics.com

step
01
CONNECT AND CONFIGURE THE ONE WIRELESS GATEWAY

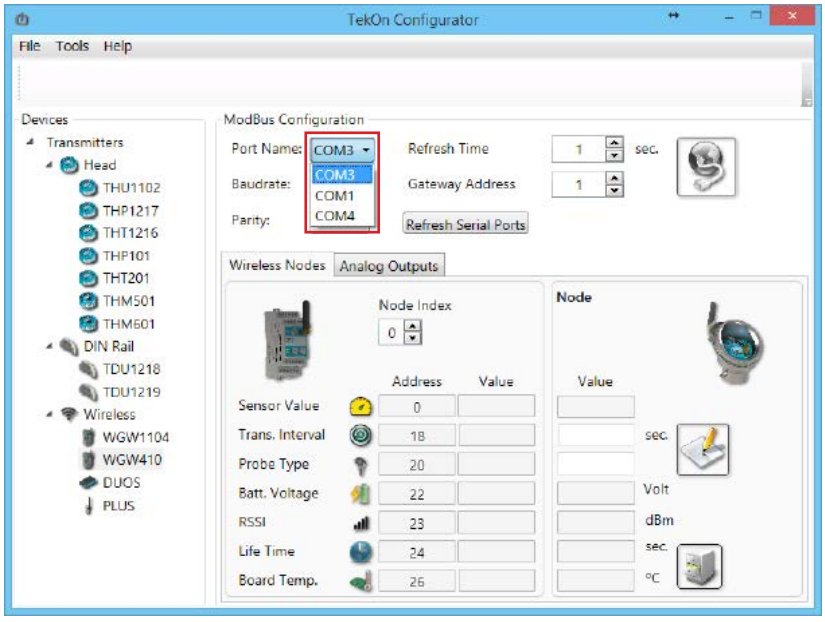
07

Click on the *Refresh Serial Ports* button.



08

Select the *Port name*[1] of the device.

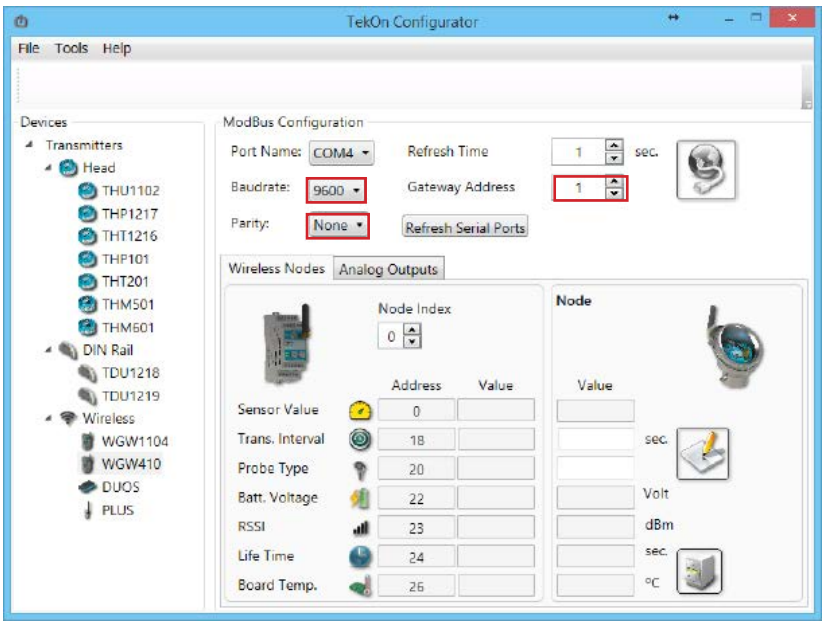


[1] You can check the device port name in the Device Manager menu in the Windows operating system.

step
01
CONNECT AND CONFIGURE THE ONE WIRELESS GATEWAY

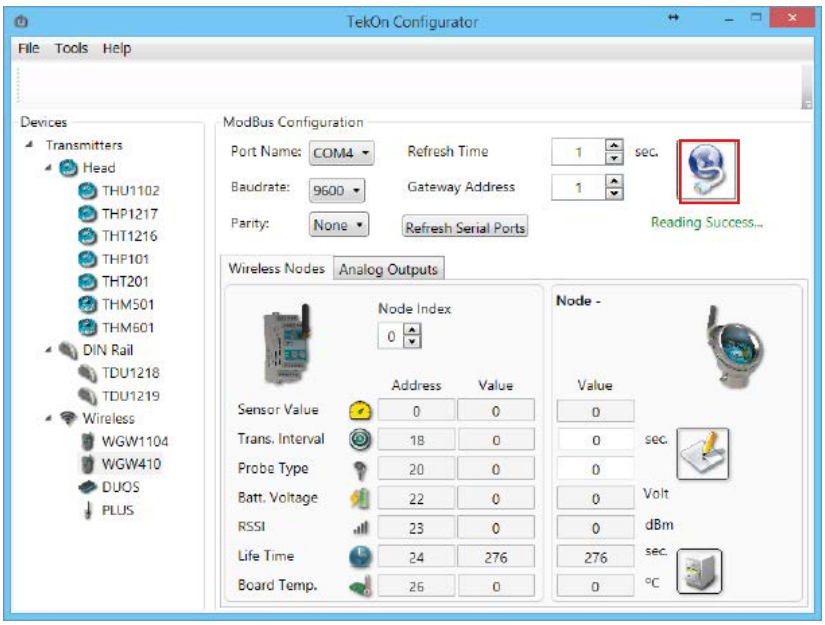
09

Select *Baudrate*, *Parity* and *Gateway Address* according to the default configurations - step 3.



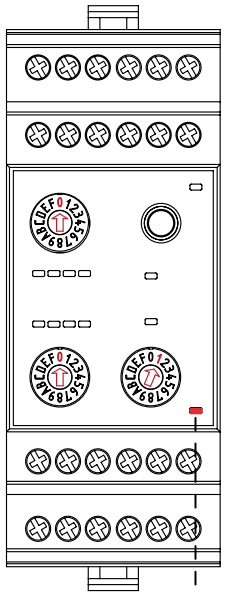
10

Click on the *Connect* ( ) button to connect the Gateway over Modbus.



NOTE:
Observe the reading Operations and Modbus LEDs. LEDs will flash at every communication.

step
01
CONNECT AND CONFIGURE THE ONE WIRELESS GATEWAY



Flashes at every communication

step
02
CONNECT AND CONFIGURE THE ONE WIRELESS TRANSMITTER

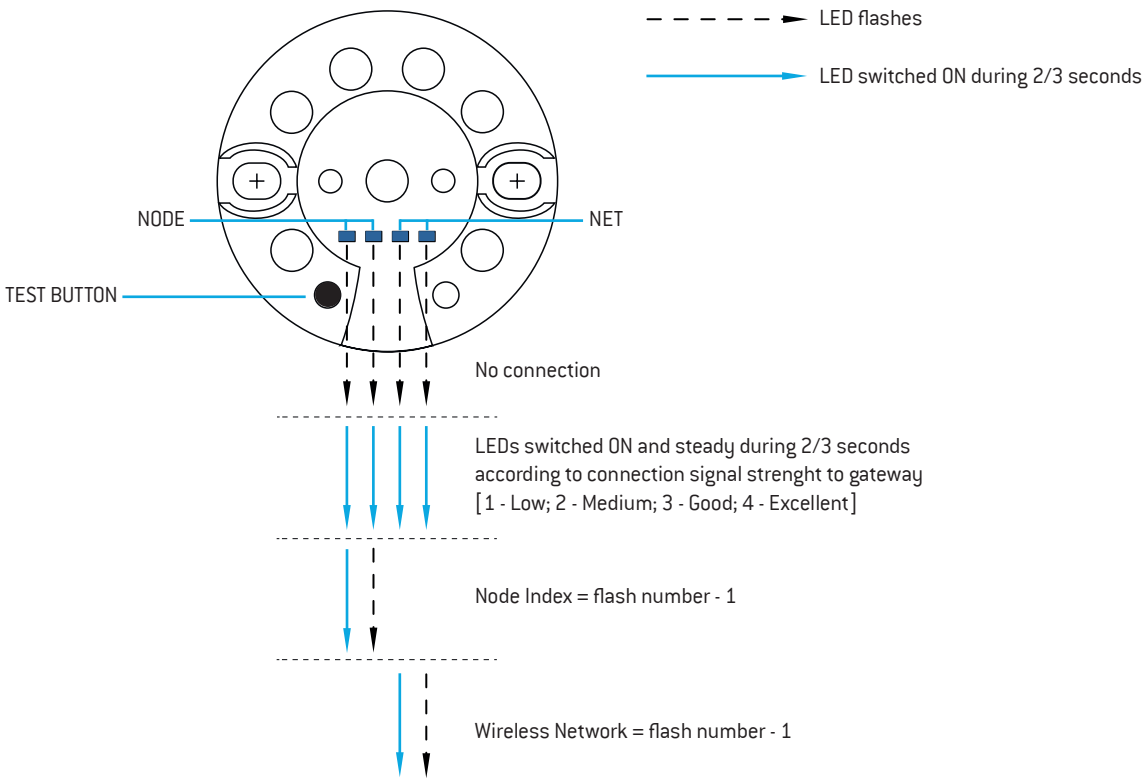
01 Connect the antenna to the *Transmitter*.

02 Open transmitters head and connect the power supply.

03

Verify Connection and Configuration

Click *Test* button to start LED signage.

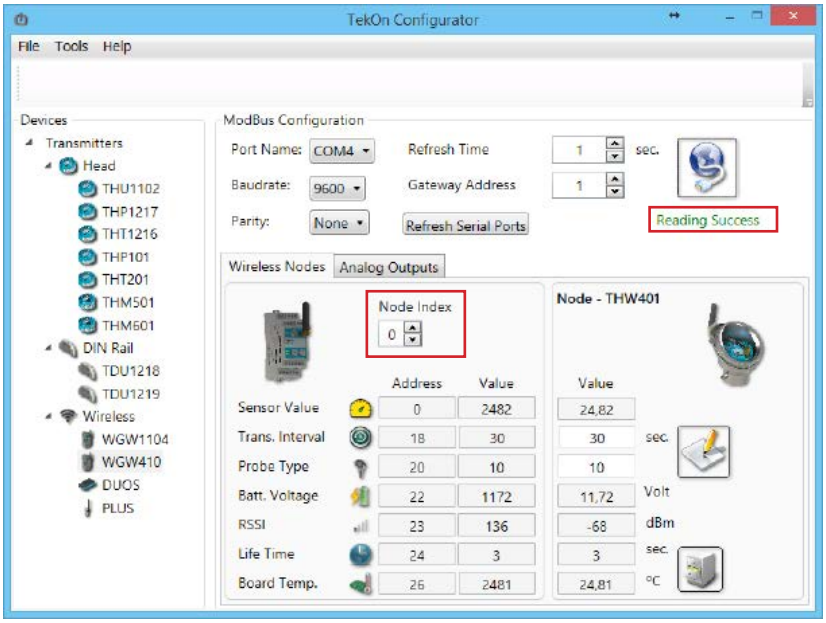


step
02
CONNECT AND CONFIGURE THE ONE WIRELESS TRANSMITTER

NOTE:
Wireless network data has to be the same of the gateway to communicate.
Configuration changes are assumed after powering ON the device. To change configurations, the device should be turned OFF and powered ON after.

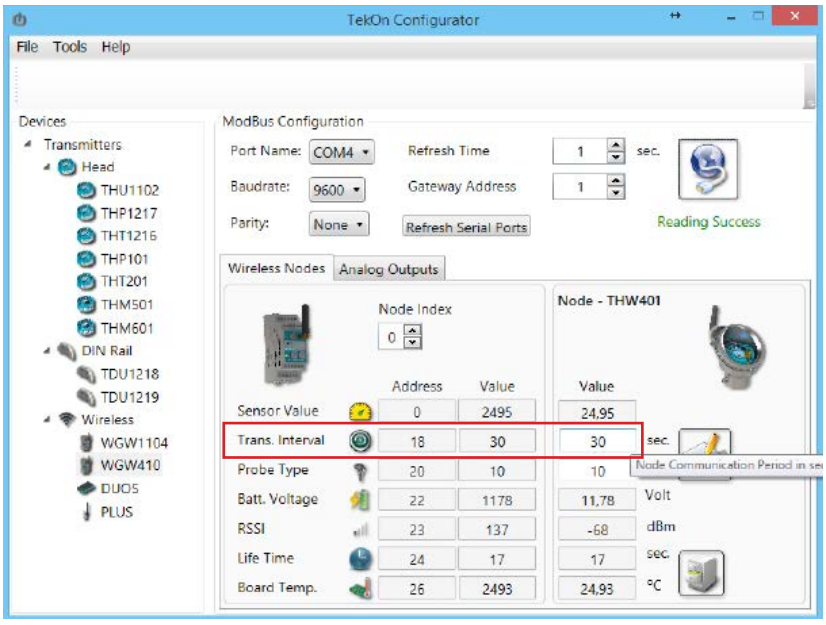
04

Open *Tekon Configurator Software*, establish connection over modbus with gateway and select the *Node Index* observed at step 3.

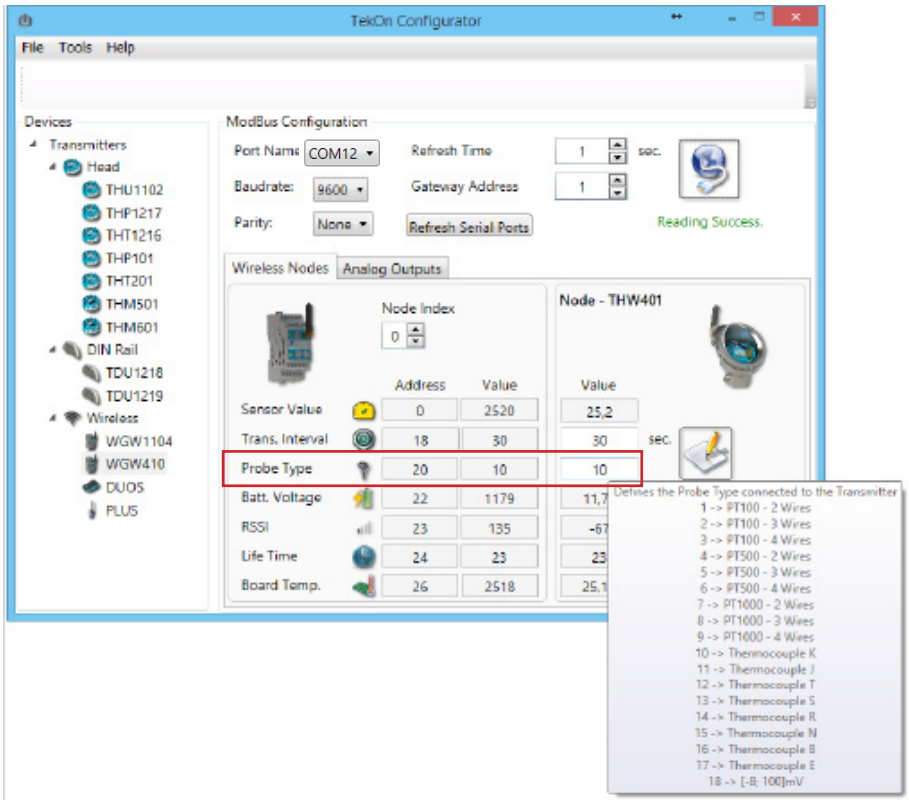


05

Configure the transmitter through the *Gateway* (Transm. Interval and Probe Type)



step
02 CONNECT AND CONFIGURE THE ONE WIRELESS TRANSMITTER



NOTE:
Any changes of these values require clicking “Write” after.

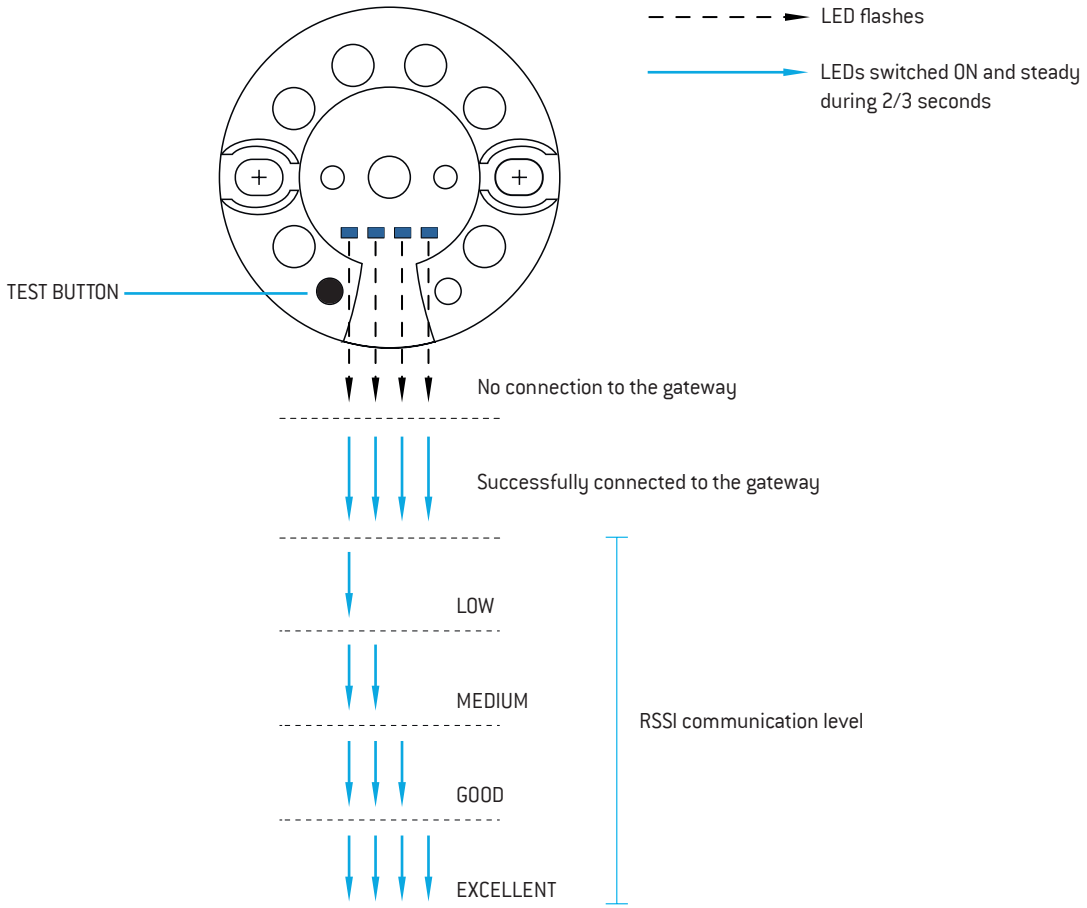
The data is written on the gateway and sended to the transmitter as soon as it wakes up (during operation cycle, the transmitter remains in sleep between communications to improve battery life).

step
02
CONNECT AND CONFIGURE THE ONE WIRELESS TRANSMITTER

06

Site Survey Mode

Press *Test* button until the LEDs light up.

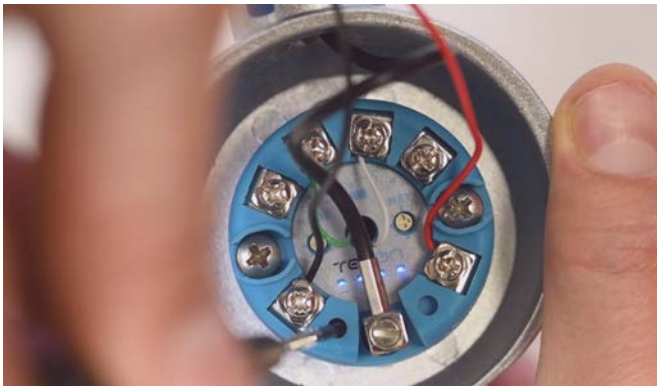


NOTE:
This procedure serves to evaluate signal quality without the need for external tools.

LEDs update every second.

07

To exit *Site Survey Mode* press *Test* button until LEDs switch OFF.

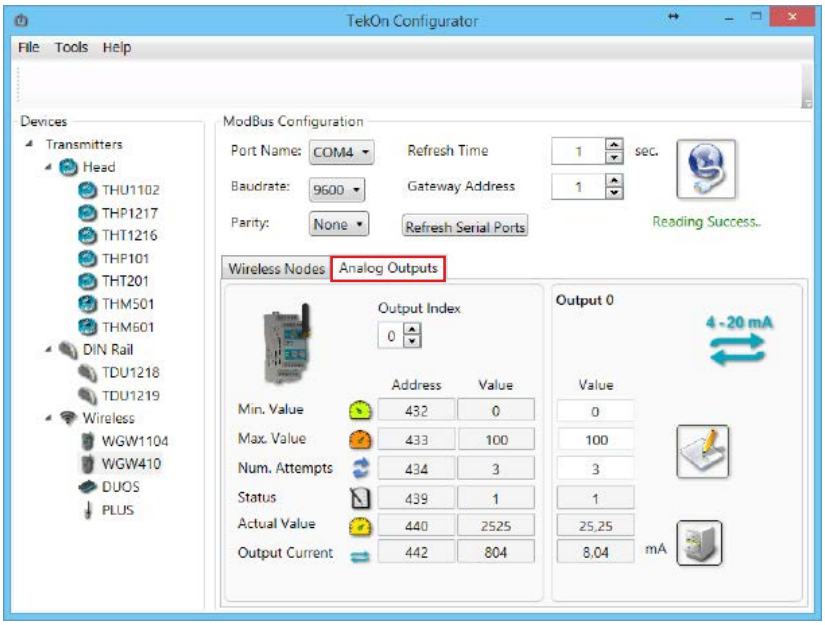


step
03 ANALOG OUTPUTS 4-20 mA

ONE WIRELESS GATEWAY has 8 analog outputs that are logically linked to the 8 first wireless network transmitters.
Example: OUTPUT INDEX 0 <=> NODE INDEX 0

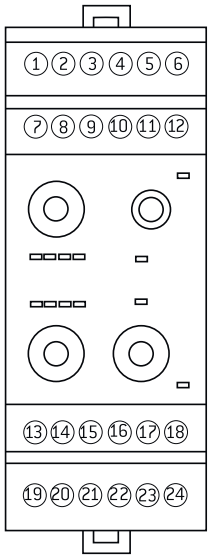
01

In the *Tekon Configurator Software* select *Analog Outputs*



Min. Value -> 4 mA
Max Value -> 20 mA
Number Attempts - Number of communication failed attempts that lead analog output to going to error state (21mA)

Example:
Transmission interval = 10 seg
Num. Attempts = 3
30 seconds without new data -> analog output goes to Error State

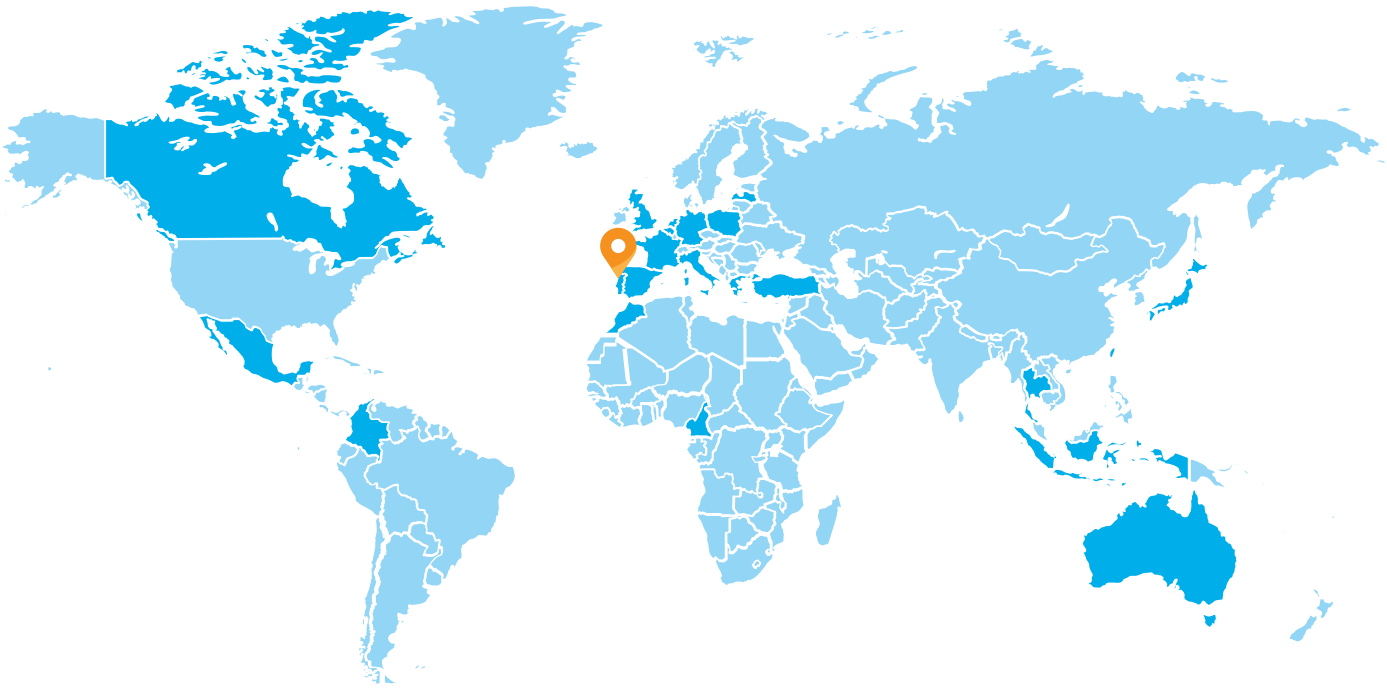


ANALOG OUTPUTS

4 - ANALOG OUTPUT INDEX 0
5 - ANALOG OUTPUT INDEX 1
6 - ANALOG OUTPUT INDEX 2
10 - ANALOG OUTPUT INDEX 3
11 - ANALOG OUTPUT INDEX 4
12 - ANALOG OUTPUT INDEX 5
16 - ANALOG OUTPUT INDEX 6
17 - ANALOG OUTPUT INDEX 7

1,2,3,7,8,13,14,15,18 - ANALOG GND

Notes



Headquarters

Product Presence

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