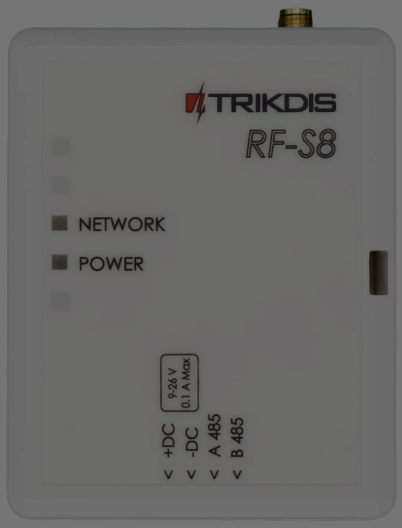
RF-S8 Wireless Transceiver



1. Description

By connecting the RF-S8 transceiver, the *„FLEXi" SP3 can work with "S8**"* wireless sensors, sirens, and remote controls.

Compatible with the SP3 security control panel.

1.1 Features

Communication:

- Line-of-sight wireless range up to 500 m.
- One *RF-S8* transceiver can be connected to the *"FLEXi" SP3* control panel.
- The product comes with a standard antenna suitable for most applications.

Connection:

1.2 Technical specifications

Parameter	Description
Power supply voltage [DC]	9-26 V DC
Current consumption	Up to 50 mA (stand by), / Up to 100 mA (short-term, while sending)
Radio frequency	868 MHz
Radio signal strength	25 mW
Communication distance	Up to 500 m
Operating environment	Temperature from -10 °C to +50 °C, relative humidity 80% at +20°C, no condensation.
Dimensions	92x62x25 mm
Weight	0,08 kg

1.3 Transceiver elements

1. SMA connector for RF antenna.
2. Light indicators.
3. Frontal case opening slot.
4. Terminal for external connections.
5. USB Mini-B connector is for firmware update.
6. Learning mode on/off button.

1.4 Purpose of terminals

Terminal	Description
+DC	Power terminal (9-26 V DC positive)
-DC	Power terminal (9-26 V DC negative)
A 485	*RS485* bus A contact
B 485	*RS485* bus B contact

1.5 LED indication of operation

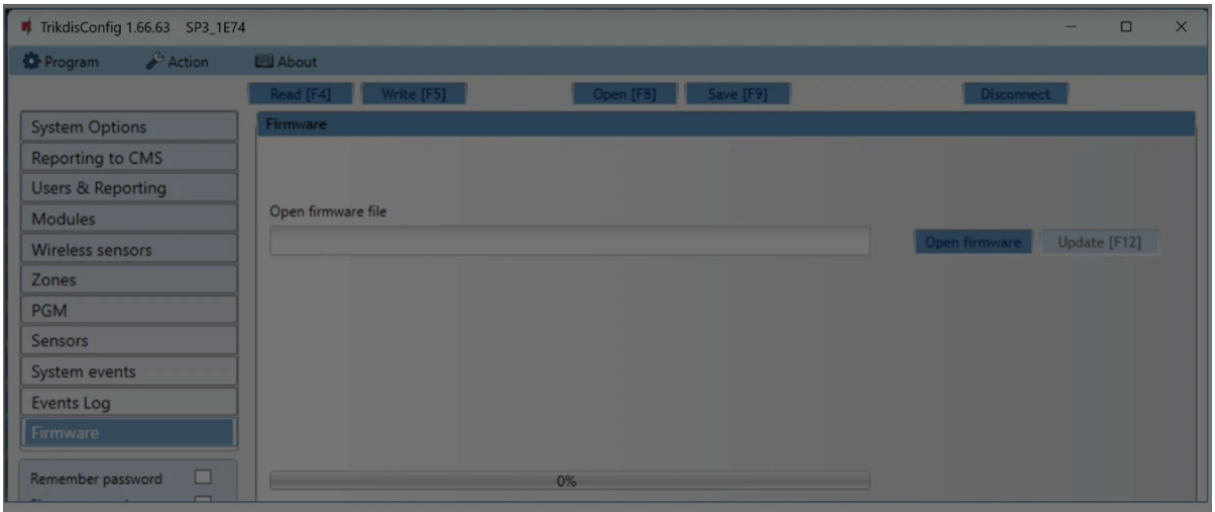
LED indicator	Light status	Description
NETWORK	Blinking green/red	Sensor learning mode
NETWORK	It lit up green for 5 sec.	Sensor learned (in learning mode)
POWER	Off	No supply voltage
POWER	Green blinking	Power supply voltage is normal
POWER	Yellow blinking	Power supply voltage is low (≤11.5 V).
POWER	Yellow solid	No communication with the control panel via RS485

2. Control panel firmware replacement

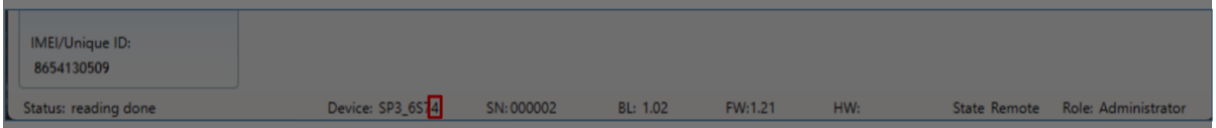
The “FLEXi” SP3 control panel firmware must be changed to revision 4 **SP3_xxx4_0122.fw** (firmware version 1.22 or higher), which will ensure the operation of “**S8**” wireless sensors. The RF-S8 wireless transceiver must be connected to the control panel.

Follow the steps below to replace the firmware:

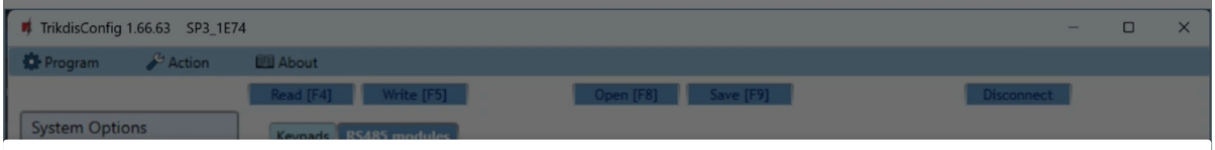
1. Connect the RF-S8 transceiver and the “FLEXi” SP3 according to the diagram.
2. Switch on the power supply to the “FLEXi” SP3 control panel.
3. Launch ***TrikdisConfig***.
4. Connect the “FLEXi” SP3 to a computer using a USB Mini-B cable.

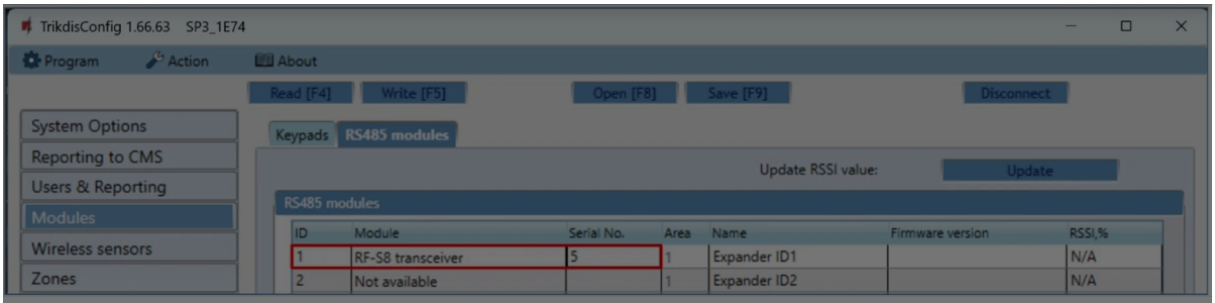


6. Click the “**Open Firmware**” button and select the **SP3_xxx4_0122.fw** firmware file.
7. Click the **Update [F12]** button.
8. Wait for the updates to finish.
9. Disconnect the USB Mini-B cable.
10. Wait 1 minute.
11. Connect a USB Mini-B cable to the “FLEXi” SP3.
12. The TrikdisConfig status bar must contain the number 4 in the control panel name.

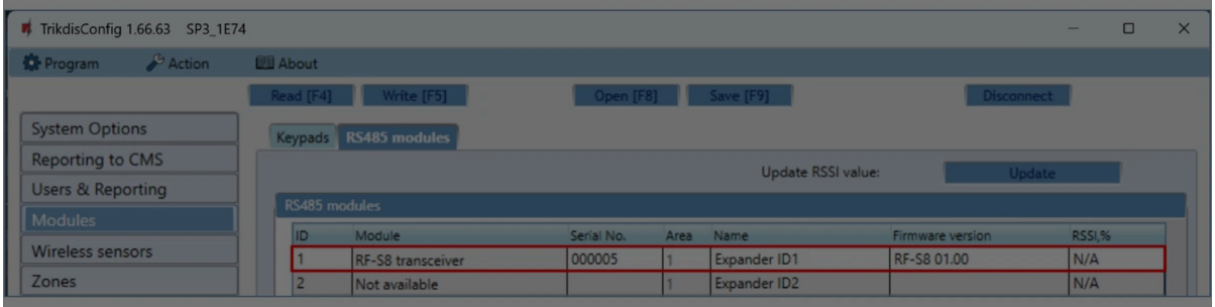


13. The list of modules should show "**RF-S8 transceiver**", as well as the serial number and firmware version. If you see the firmware version of the RF-S8 transceiver, you can skip steps 14-22.

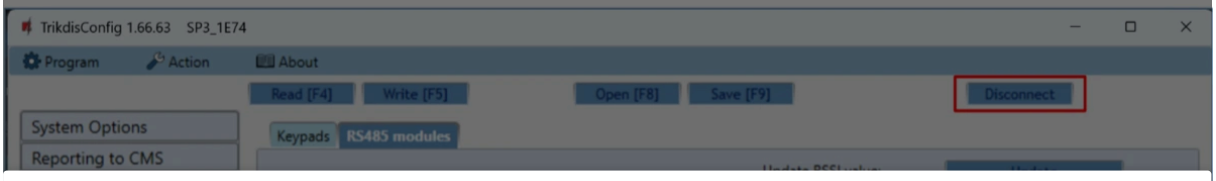




16. Click **Write [F5]**.
17. Disconnect the USB Mini-B cable.
18. Wait 1 minute for the “FLEXi” SP3 and RF-S8 to link together.
19. Connect a USB Mini-B cable to the “FLEXi” SP3.
20. Click **Read [F4]**.
21. The firmware version of the RF-S8 will appear in the “**Modules**” window.



22. The RF-S8 module is now linked to the “FLEXi” SP3.
23. Disconnect the USB Mini-B cable.
24. Click “**Disconnect**”.



3. Linking a wireless sensors

3.1 Remote linking of wireless sensors

Using TrikdisConfig, remotely connect to the “FLEXi” SP3 control panel.

IMPORTANT

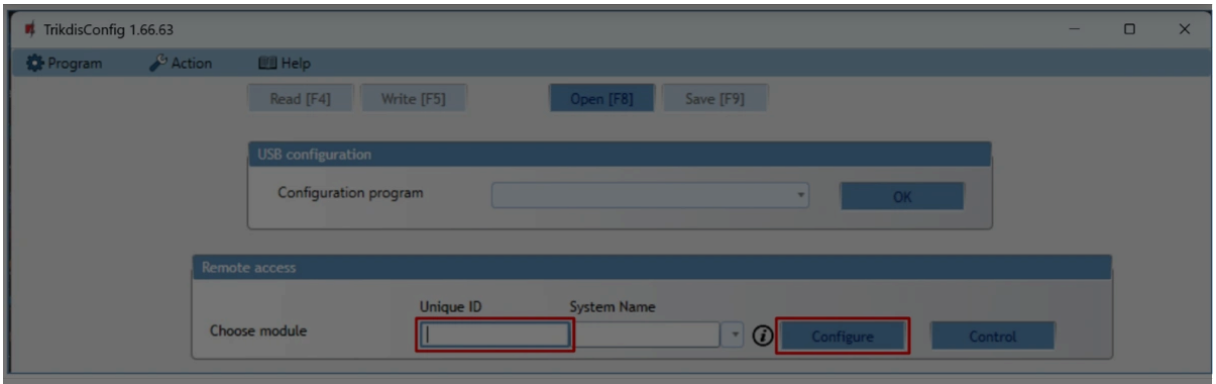
Remote configuration will only work when "FLEXi" SP3:

1. An activated SIM card must be inserted and the PIN code must be entered or disabled.
2. Mobile internet is activated on the SIM card.
3. Protegus cloud service must be enabled.
4. The power must be switched on ("**PWR**" LED must be green blinking).
5. Must be connected to network ("**NET**" LED must be green solid and yellow blinking).

IMPORTANT

Wireless sensors can be enrolled to the control panel and can also be unenrolled from the control panel. When unlinking wireless sensors from the security control panel, the security control panel must not be in the wireless sensor learning mode. Before enrolling wireless sensors, they must be unenrolled from the control panel. Press and hold the learning button for 5 seconds. Release the button when the indicator flashes green three times. The wireless sensor will be unenrolled from the control panel It is recommended to perform this procedure for all wireless sensors before registering them. IMPORTANT: IF THE WIRELESS SENSOR IS ACCIDENTALLY UNPAIRED, IT WILL NOT WORK WITH THE SECURITY CONTROL PANEL.

In the “**Remote access**” section enter the control panel “**IMEI/Unique ID**” number. This number can be found on the device and the packaging sticker.

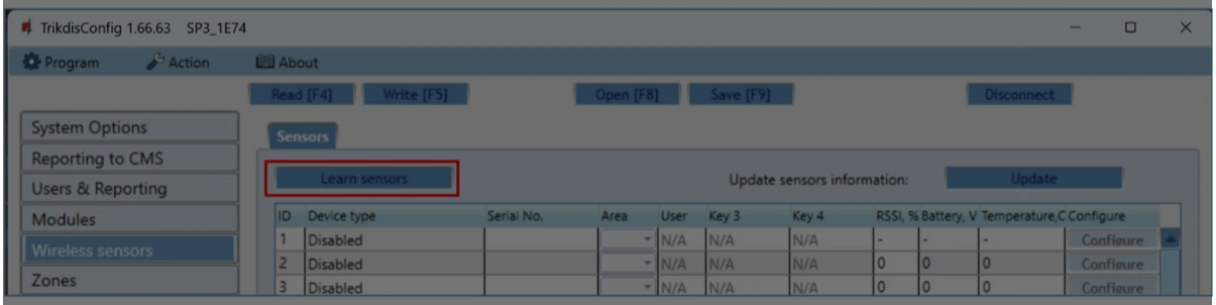


Click “**Configure**”.

In the newly opened window click **Read [F4]**. If required, enter the administrator or installer code.

Go to the “**Wireless sensors**” window.

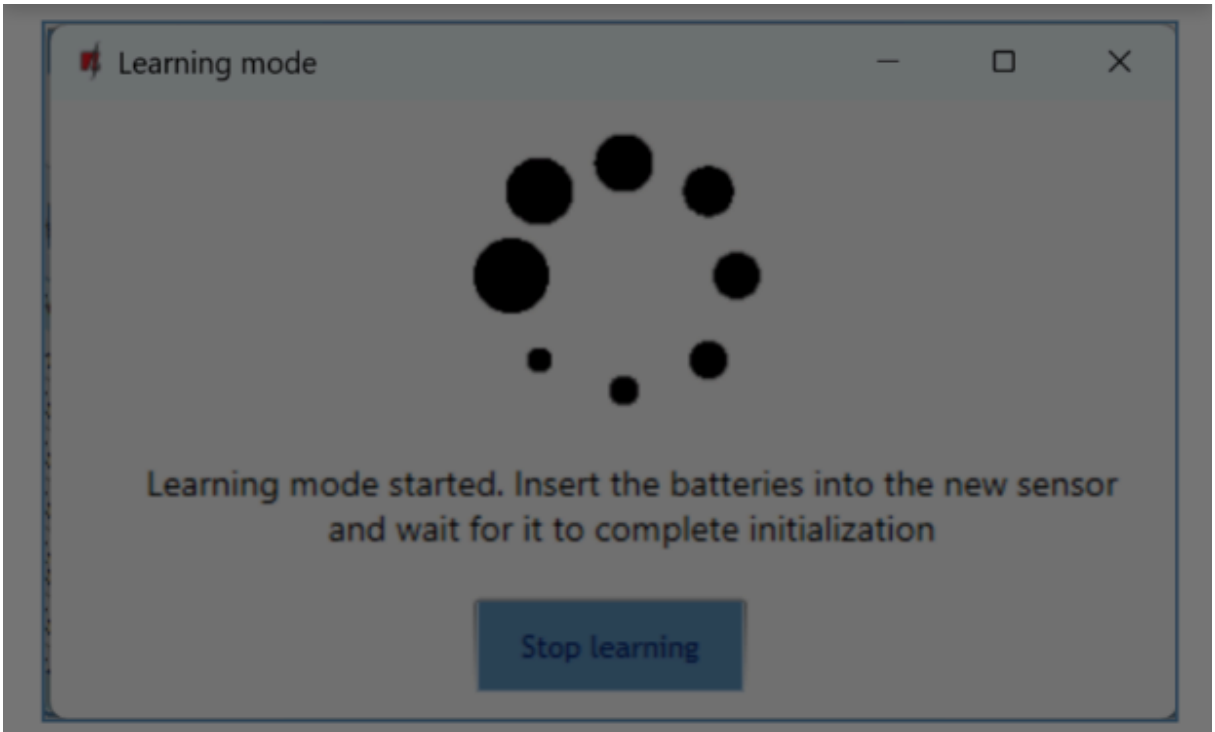
Click the “**Learn sensors**” button.



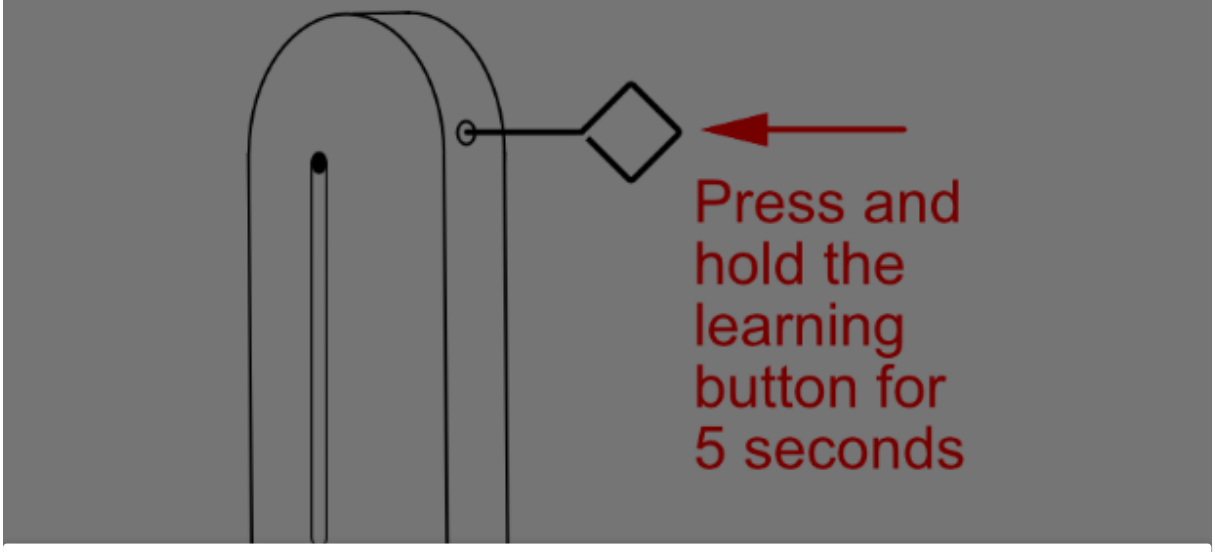
All wireless sensors can be linked simultaneously. Insert batteries into the wireless sensors (PIR, magnetic contact, flood detector, smoke detector, siren).

When enrolling sensors, the *RF-S8* module must be at least 1 m from the sensors.

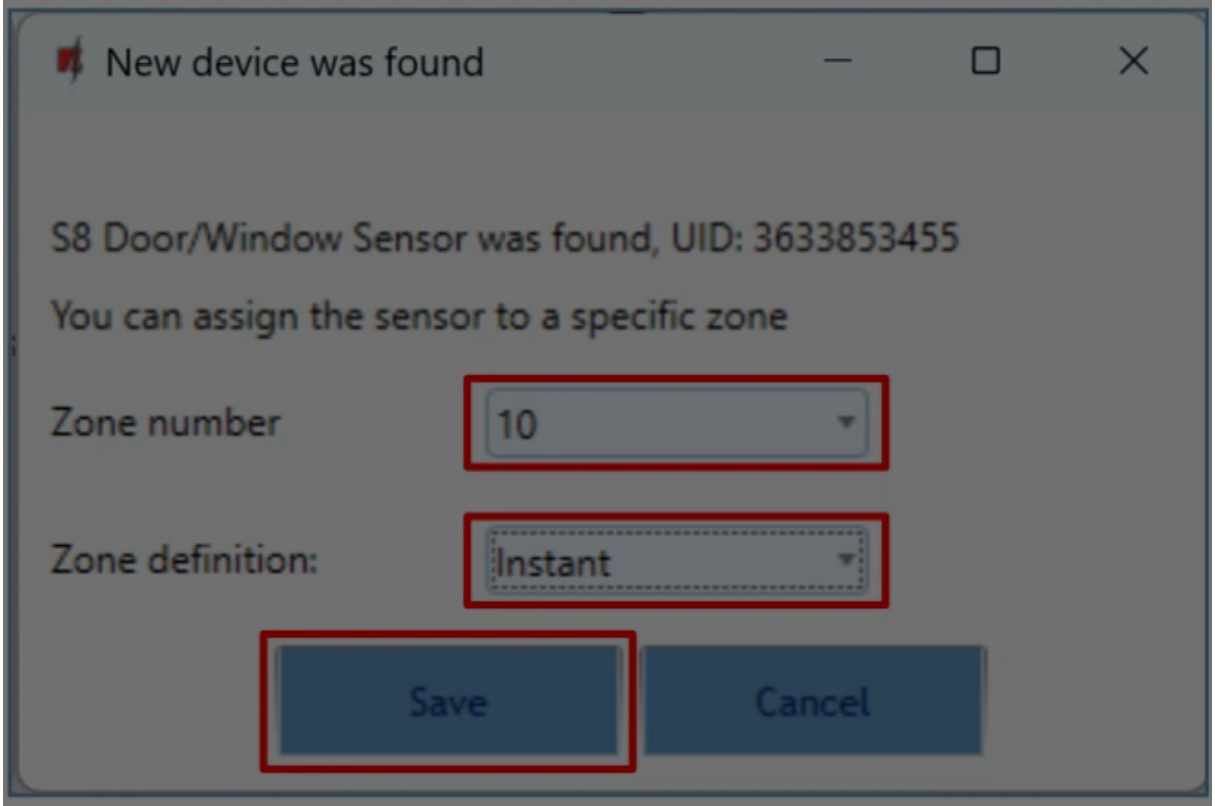
1. The “**NETWORK**” LED on the RF-S8 module will flash green/red.
2. RF-S8 module - switches to learning mode. TrikdisConfig will open the sensor binding window.



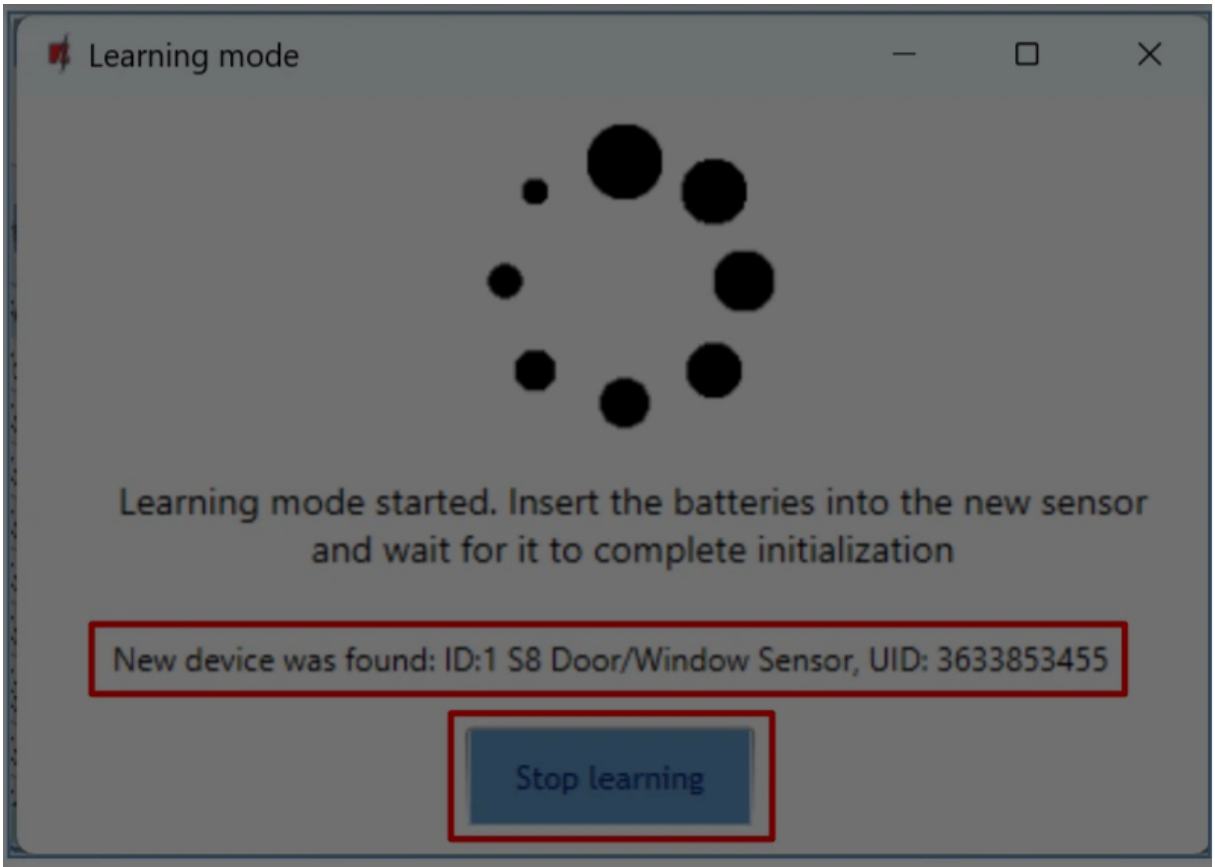
3. Press and hold the learning button for 5 seconds. Release the button when the indicator flashes green four times.



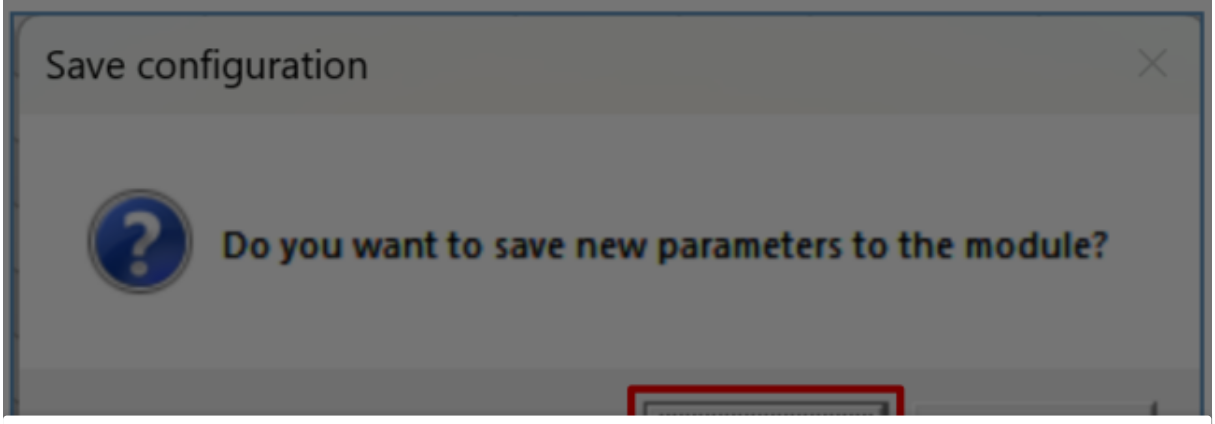
5. TrikdisConfig will open a new window in which you need to assign a "**Zone Number**" and "**Zone Definition**" to the wireless sensor.
6. Click "**Save**".

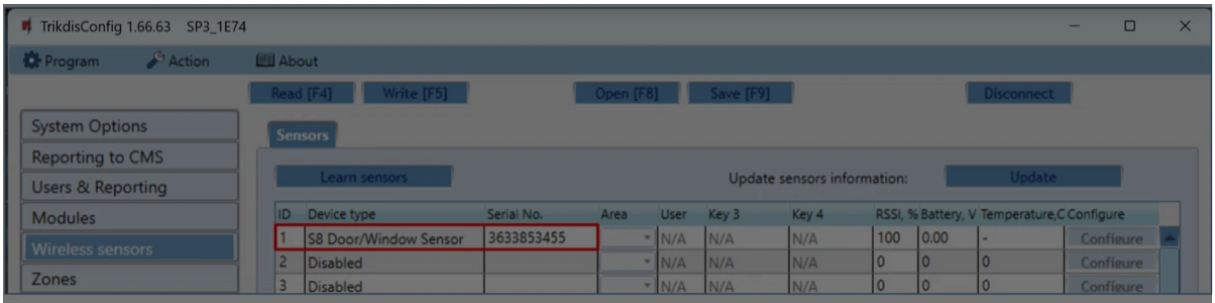


7. Wireless sensor is included in the list of sensors.
8. If you need to add the next sensor, you need to press the learning button on the sensor. And make the settings described above.
9. Click "**Stop learning**" to complete the registration of wireless sensors.

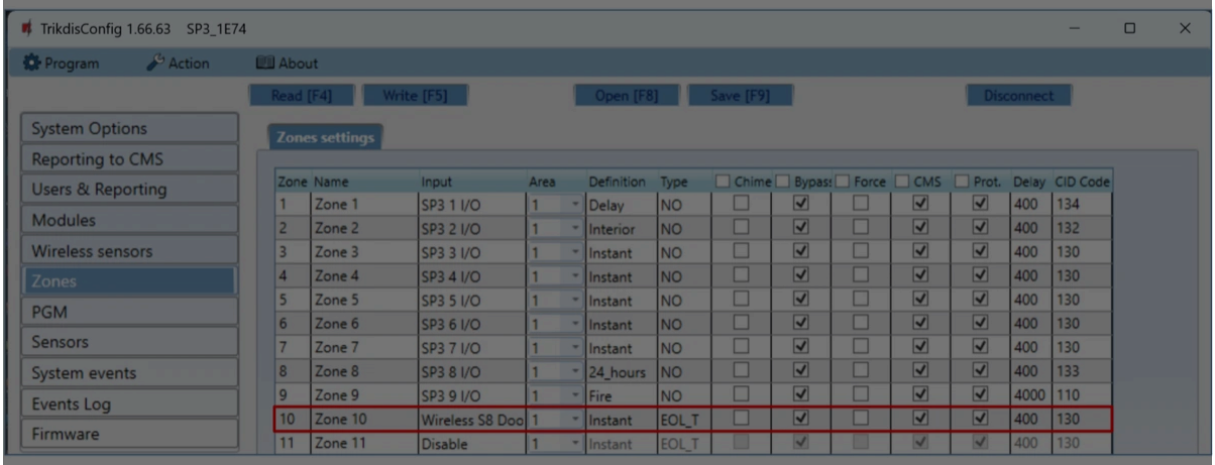


10. Click “**Yes**” for the sensors to be written to the “FLEXi” SP3 control panel or "**No**" if you want to adjust the parameters additionally.





Check that the sensors are correctly assigned to the "**Zones"** and "**Areas**" of the control panel ("**Zones**" window).



If you set zone **"Type"** EOL-T, then the sensor tamper monitoring mode will be enabled.

After making changes, press **Write [F5]**.

NOTE

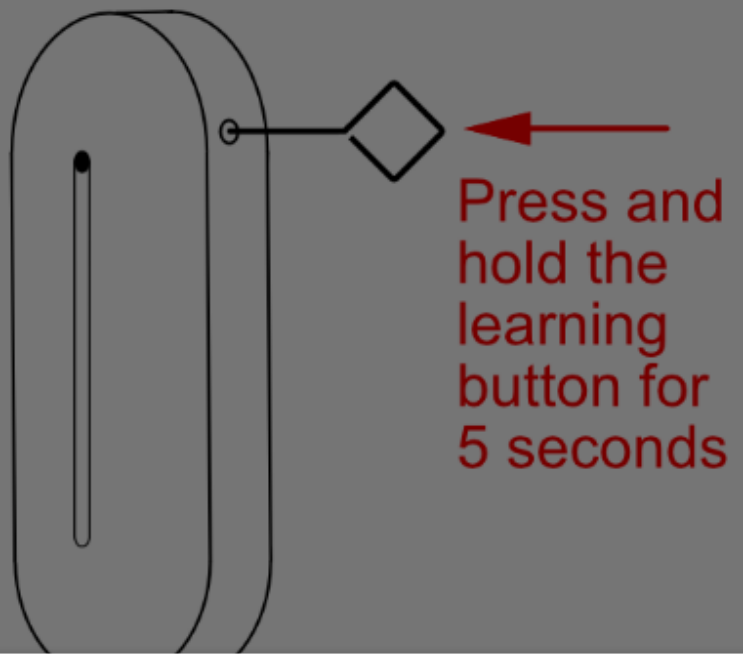
To delete wireless sensors from the "FLEXi" SP3's memory:

1. Launch ***TrikdisConfig***.
2. Connect the „FLEXi" SP3 to a computer using a USB Mini-B cable or connect to the „FLEXi" SP3 remotely. Click the **Read [F4]** button.

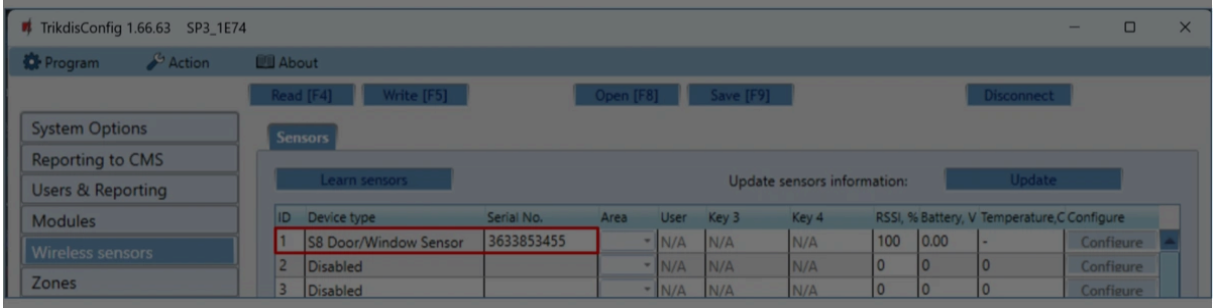
3.2 Linking wireless sensors without remote access

All wireless sensors can be linked simultaneously. Insert batteries into the wireless sensors (PIR, magnetic contact, flood detector, smoke detector, siren). **When enrolling sensors, the *RF-S8* module must be at least 1 m from the sensors.**

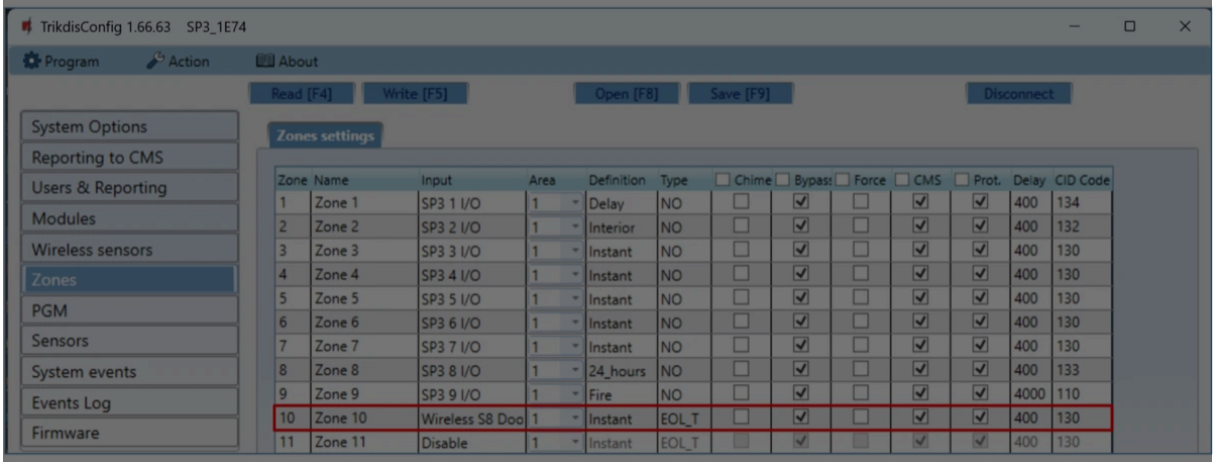
1. Make sure that the RF-S8 transceiver is registered with the „FLEXi“ SP3 control panel.
2. Switch on the power supply to the “FLEXi” SP3 control panel.
3. Remove the cover from the RF-S8 transceiver.
4. Press and hold the "**LEARN**" button on the RF-S8 module until the "**NETWORK**" indicator starts flashing green/red.
5. Release the "**LEARN**" button.
6. The flashing "**NETWORK**" indicator indicates that the RF-S8 is in the wireless device registration mode.
7. Press and hold the learning button for 5 seconds. Release the button when the indicator flashes green four times.



11. To complete the registration of wireless sensors, press and hold the "**LEARN**" button until the "**NETWORK**" indicator stops flashing green/red. Release the "**LEARN**" button. The RF-S8 transceiver has exited the registration mode.
12. Connect a USB Mini-B cable to the “FLEXi” SP3.
13. Launch TrikdisConfig. Press the **Read [F4]** button.
14. TrikdisConfig window "**Wireless sensors**" will contain a list of registered wireless devices. In the field "**Serial No.**" will contain the serial numbers of the sensors.



15. Check that the sensors are correctly assigned to the “**Zones”** and “**Areas**” of the control panel (“**Zones**” window).



16. After making changes, press **Write [F5]**.
17. Wireless sensors registered.