# SIGNOW
USER GUIDE V1.0x

1. INTRODUCTION

SigNow software was developed especially for **NOVUS** line of sensors and transmitters. With a friendly interface, it facilitates the configuration and management of the devices. It is possible to communicate through the USB, RS485, or HART interface or through a Modbus TCP connection. In addition, **SigNow** has a diagnostic tool that allows you to view a dynamic graph on the progress of the process and force values in certain parameters.

In addition to providing a description of the features, this manual also gives quick examples of how to configure the software. For detailed instructions on each parameter of each device, however, you should check the specific operation manual.

The software can be downloaded from our website www.novusautomation.com.

2.   INSTALLATION AND REQUIREMENTS

2.1   INSTALLATION

To install **SigNow**, just run the ***SigNowSetup.exe*** file, available on our website, and follow the instructions below:
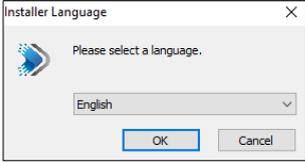
	Step 1: Select the installation language and click **Ok** to proceed.
	Step 2: Click **Next**.
	Step 3: Select the drivers to be installed and click **Next**.
	Step 4: If desired, click **Browse** to define a new installation location. To keep the current location, click **Next**.
	Step 5: Select the Start Menu folder where the program shortcut should be created. To keep the current location, click **Install**.
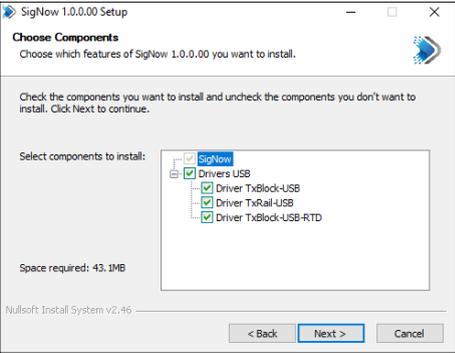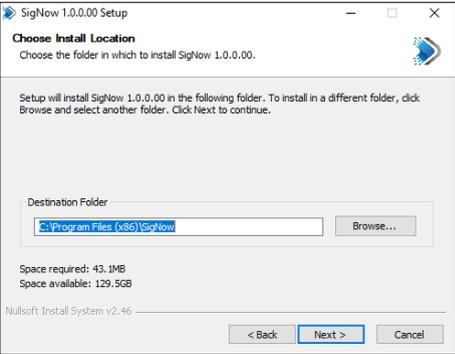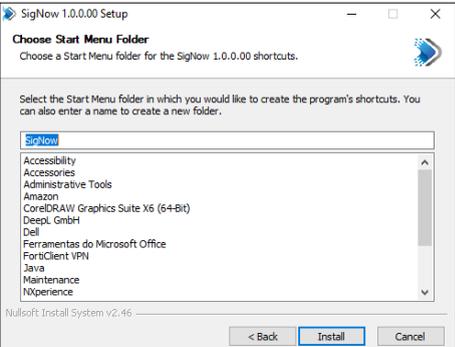
	Step 6: Just wait while **SigNow** and the drivers are being installed. Click **Install** whenever the software prompts you to install the driver for one of the devices you selected in step 3.
	Step 7: Click **Finish** to complete the installation.
	Step 8: Ready. **SigNow** has been installed and the home screen will be displayed.
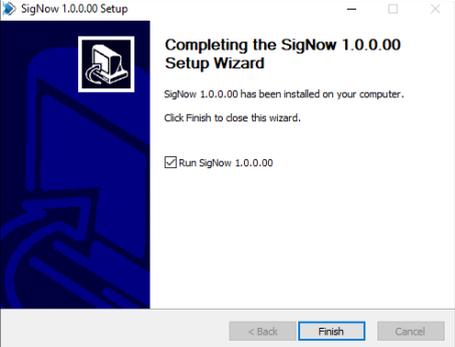
2.2   SYSTEM REQUIREMENTS

- PC with dual core processor of 2 GHz or higher
- RAM: 8 GB
- Monitor and video card with minimum resolution of 1280 x 720
- Hard disk space: 500 MB
- Operating system: Windows 10 or higher
- USB Port
- Network interface (To use the software features that require Internet access)

3.   STARTING SIGNOW

Once started, **SigNow** displays the following buttons: **Configuration**, **Create Configuration**, **Diagnostic**, and **Open Configuration**, located in the center of the software, and **Connections**, **Firmware** and **Settings**, located at the bottom.

Figure 1 –   Main screen

3.1   CONFIGURATION

Allows you to read the device to be configured by the software via the USB interface. It is possible to communicate through the USB, RS485 or HART interface o through a Modbus TCP connection.

This feature will be described in detail in the CONFIGURATION chapter.

3.2   CREATE CONFIGURATION

Allows you to create a configuration for a device to be selected on the connection screen. Once created, this configuration can be saved and used later. You can access it through the **Open Configuration** section. At this point, it is not necessary that the device be connected to the software.

This feature will be described in detail in the CREATE CONFIGURATION chapter.

3.3   DIAGNOSTIC

Allows you to view diagnostic information about the operation of the connected device. Additionally, this section allows you force values for certain parameters.

This feature will be described in detail in the DIAGNOSTIC chapter.

3.4   OPEN CONFIGURATION

Allows you to open a configuration file created through the **Open Configuration** section. They are three ways to do this:

1) By searching in a specific directory on your computer, where the desire filed has been saved.
2) By selecting a configuration file that has been marked as a bookmark.
3) By selecting a recent file from the list shown by the software.

This feature will be described in detail in the OPEN CONFIGURATION chapter.

3.5   CONNECTIONS

Allows you to manage and configure the RS485 and Modbus TCP connections.

This feature will be described in detail in the CONNECTIONS chapter.

3.6   FIRMWARE

Allows you to update the firmware of the connected device.

This feature will be described in detail in the FIRMWARE chapter.

3.7   SETTINGS

Allows you to configure SigNow preferences, such as default language and whether the software checks for updates automatically.

This feature will be described in detail in the SETTINGS chapter.

4. CONFIGURATION

When clicking the **Configuration** button of **SigNow** home screen, 4 buttons, related to the device connection and reading mode, will be shown: USB, Modbus TCP, RS485, and Hart. These options allow you to read and configure any connected device.

4.1 USB

As shown in the figure below, this button allows to display the devices connected to the computer via the USB interface:
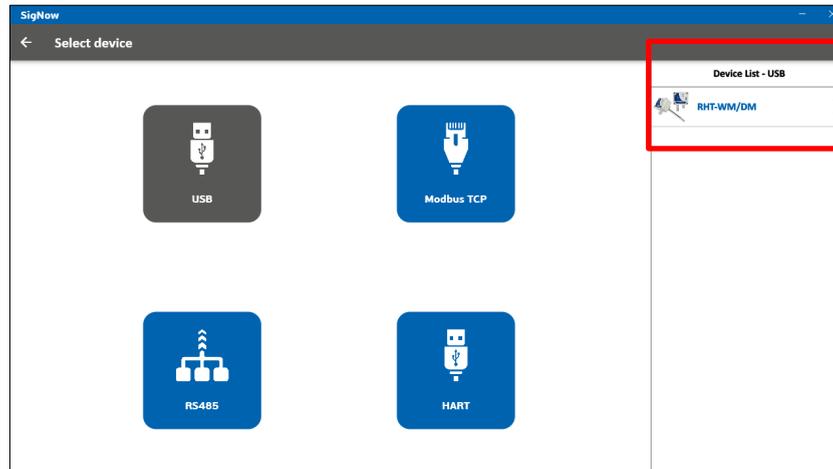

Figure 2 –   USB connection

Clicking on the desired device will allow you to access and edit its configuration parameters, as shown in the CREATE CONFIGURATION chapter.

4.2 MODBUS TCP

As shown in the figure below, this button allows to display the devices connected to the computer via the Modbus TCP connection. To add a new device or see a device via Modbus TCP, however, it will be necessary to configure a Modbus TCP connection, filling the connection management parameters:
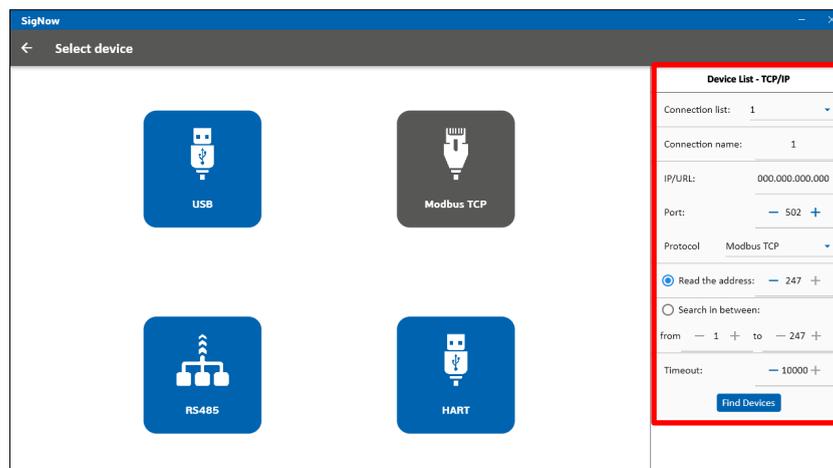

Figure 3 –   Modbus TCP connection

Modbus TCP connection parameters:

- **Connection list:** If already exists, it allows you to select the connection to be used. Select the **New Connection** option allows you to set specific parameters to create a new network. It is also possible to change the configuration of an already existing network when selecting in this parameter.
- **Connection name:** It allows you to add a name of up to 10 characters for the connection to be created.
- **IP/URL:** It allows you to enter the IP or URL to be used to perform the connection.
- **Port:** It allows you to set the connection port.
- **Protocol:** It allows you to set the protocol to be used during the connection: "Modbus TCP" or "Modbus RTU over TCP".
- **Read the address:** Option to be used when the user already knows the device address to connect.
- **Search in between:** Option to be used when the user already knows the address range to connect.
- **Timeout:** It allows you to set the connection Timeout. From 0 to 9999.

After configuring the necessary parameters, simply click the **Find Devices** button to find the devices within the configured address range, as shown in the figure below:
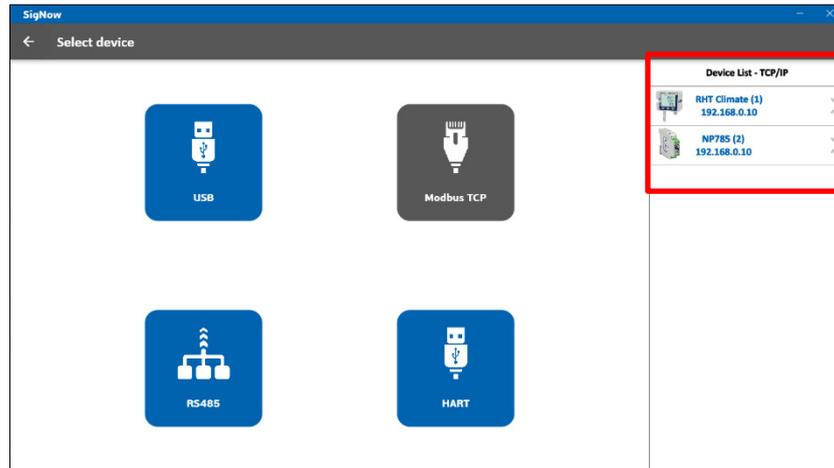

Figure 4 – List of devices found

Clicking on the desired device will allow you to access and edit its configuration parameters, as shown in the CREATE CONFIGURATION chapter.

4.3 RS485

As shown in the figure below, this tab allows you to display the devices connected via the RS485 interface. To add a new device or view a device via RS485, however, you will need to configure the RS485 connection by filling in the connection management parameters:
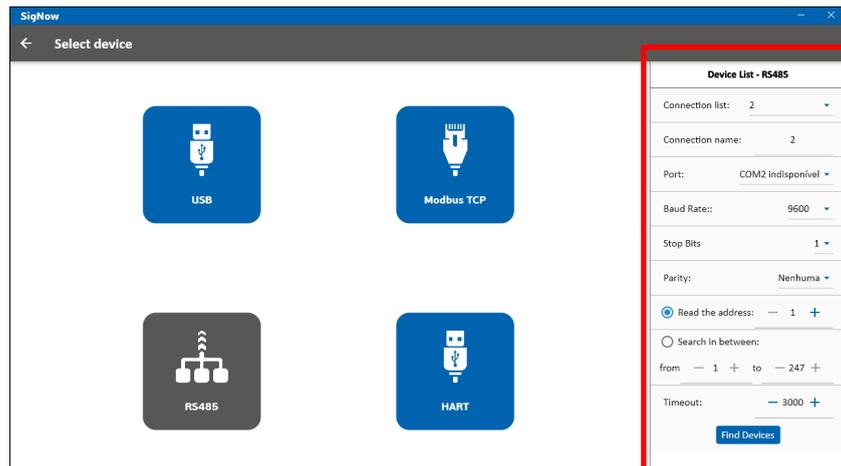

Figure 5 – RS485 connections

RS485 connection parameters:

- **Connection list:** If already exists, it allows you to select the connection to be used. Select the **New Connection** option allows you to set specific parameters to create a new network. It is also possible to change the configuration of an already existing network when selecting in this parameter.
- **Connection name:** It allows you to add a name of up to 10 characters for the connection to be created.
- **Port:** It allows you to set the connection port.
- **Baud Rate:** It allows you to set the connection Baud Rate: 1200, 2400, 4800, 9600, 1922, 38400, 57600 or 115200.
- **Stop Bits:** It allows you to set the connection Stop Bits: 1 or 2.
- **Parity:** It allows you to set the connection parity: None, Even or Odd.
- **Read the address:** Option to be used when the user already knows the device address to connected.
- **Search in between:** Option to be used when the user already knows the address range to connect.
- **Timeout:** It allows you to set the connection Timeout. From 0 to 9999.

After configuring the necessary parameters, simply click the **Find Devices** button to find the devices within the configured address range, as shown in the figure below:
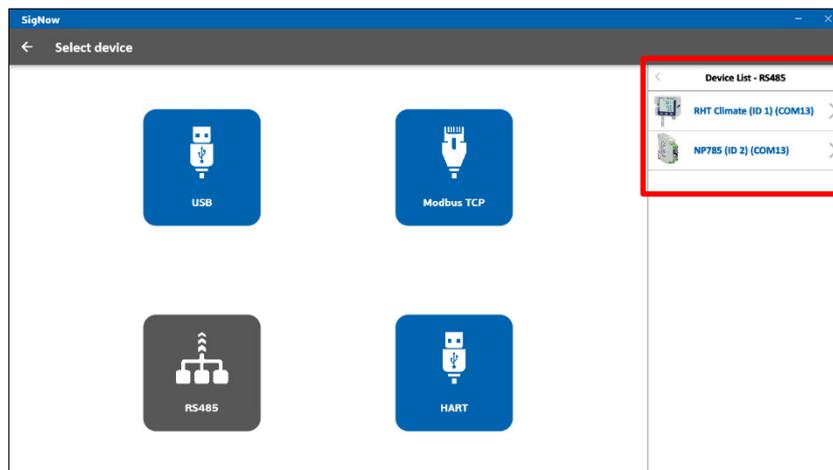

Figure 6 –   List of devices found

Clicking on the desired device will allow you to access and edit its configuration parameters, as shown in the CREATE CONFIGURATION chapter.

4.4   HART

As shown in the figure below, this button allows you to display **NOVUS** HART devices:
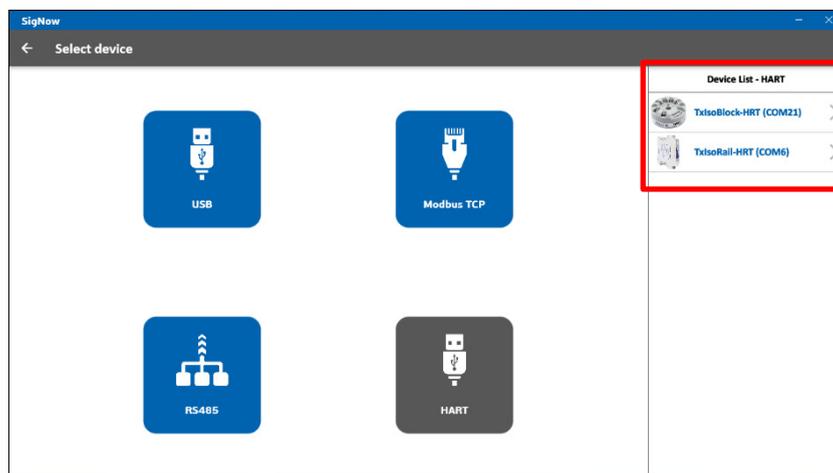

Figure 7 –   HART Connection

Clicking on the desired device will allow you to access and edit its configuration parameters, as shown in the CREATE CONFIGURATION chapter.

5. CREATE CONFIGURATION

The **Create Configuration** button on **SigNow** home screen allows you to create a configuration for the selected device. To perform this procedure, it is not necessary that the device is connected to the computer and the software. A configuration created through this section can be saved for later use.

As shown in the figure below, clicking on each segment displays a list of all **NOVUS** sensors and transmitters. Once you select any of them, you can confirm the model for which you want to create a configuration and see information such as description and descriptor version.
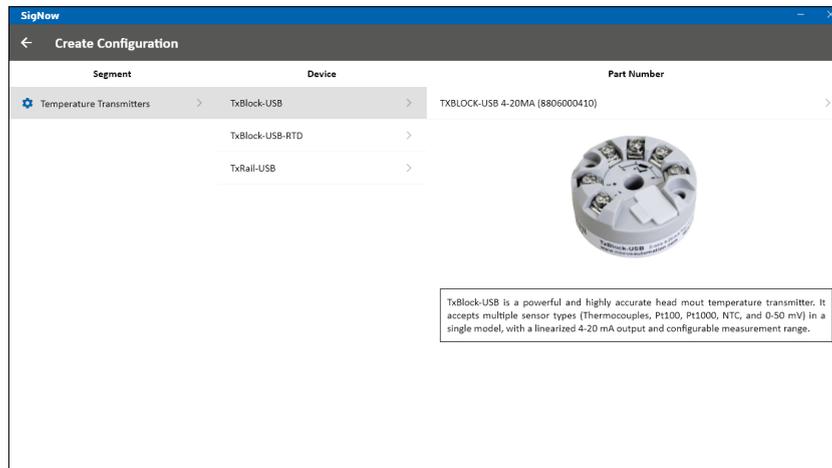

Figure 8 – Creating a configuration

Once you have selected the desired device and model, you will be redirect to the home screen. The sections may differ according to the device:
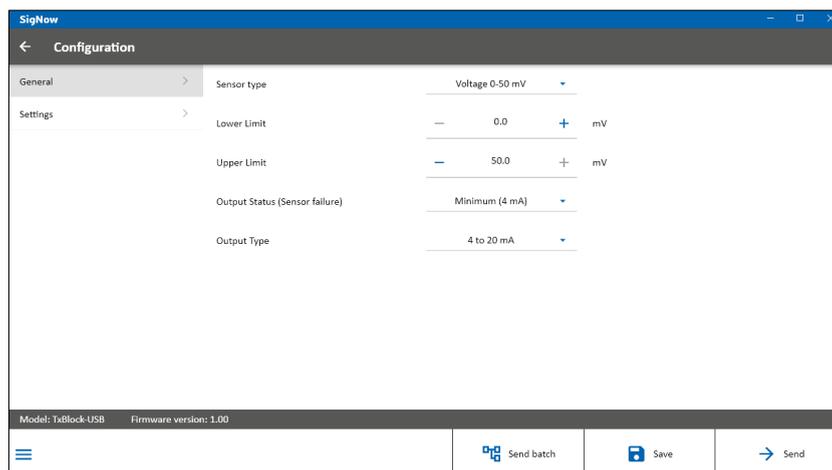

Figure 9 – Configuration screen

Although the specific parameters of each section differ for each device (and will be explained in detail in their specific manual), the **Send batch**, **Save**, and **Send** buttons, located at the bottom of the page, and the **Manual**, **Support**, **Event Log**, and **Report** buttons, located when clicking the ≡ button, will always be the same. Their functions will be explained later in this chapter.

5.1 SEND BATCH

This button allows you to send a configuration in batch, that is, to several devices, through the selected COM port, as shown in the figure below:
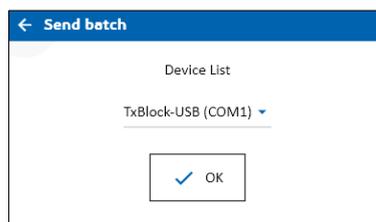

Figure 10 – Batch configuration

5.2 SAVE

This button allows you to save the configuration created in a file with extension *.scf (*SigNow Configuration File*) in the location you indicated. Later, you can open this file using the **Open Configuration** button, located on the home screen (see OPEN CONFIGURATION chapter), or by double-clicking on the file itself.

5.3 SEND

This button allows you to send the performed settings to the connected device.

5.4 SIDE MENU

This side menu has a set of buttons, displayed by clicking the ☰ button, as shown in the figure below:

Figure 11 – Side menu buttons

5.5.1 MANUAL

This button allows **SigNow** to redirect you to the online page of the product manual, available on **NOVUS** website and displayed in your favorite browser. There, you can view the PDF version of the manual.

5.5.2 SUPPORT

This button allows you to contact Technical Support. When clicking on it, you will be immediately redirected to **NOVUS** Technical Support web page in your favorite browser. There, you can open a ticket for service, view video tutorials, consult manuals, among other options.

5.5.3 EVENT LOG

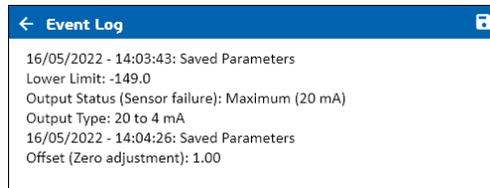This button allows you to view a window with event logs about the configuration being made:

Figure 12 – Event log

By clicking the 🔲 button, you can save the event logs to a file with extension *.txt in the location of your choice.

5.5.4 REPORT

This button allows you to generate a configuration report with extension *.pdf, which will be saved in the location of your choice. This report contains information about all device parameters, as shown in the figure below:

Figure 13 – Report

To facilitate later identification, this document has a header with information about the device model, serial number, and firmware version. In the footer, you can see the date and time when the document was created.

6. DIAGNOSTIC

The **Diagnostic** button allows you to analyze the settings and processes of the connected device. Before you can start diagnostics, however, you must select the connection mode, as shown in the figure below:
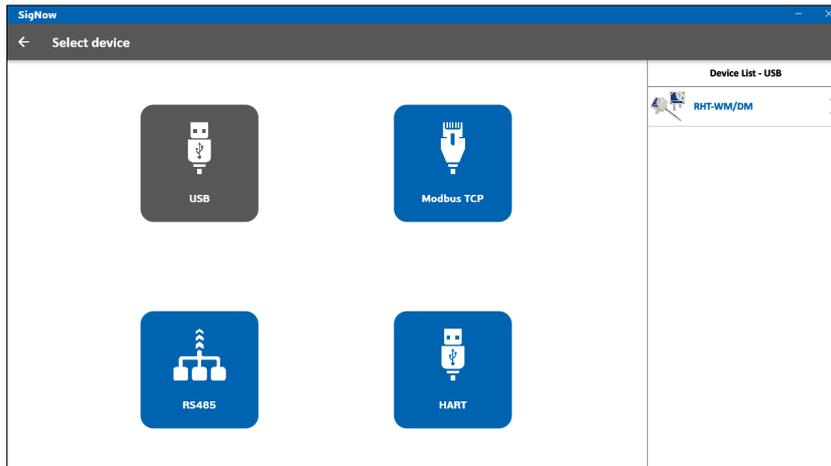

Figure 14 – Selecting a device

You can select a device connected both via USB and the RS485 interface, through a Modbus TCP connection, or HART (For more information about connecting devices, see the CONFIGURATION chapter).

Once you have selected the device (in this example, **TxBlock-USB**), **SigNow** will display a screen like the one shown below:
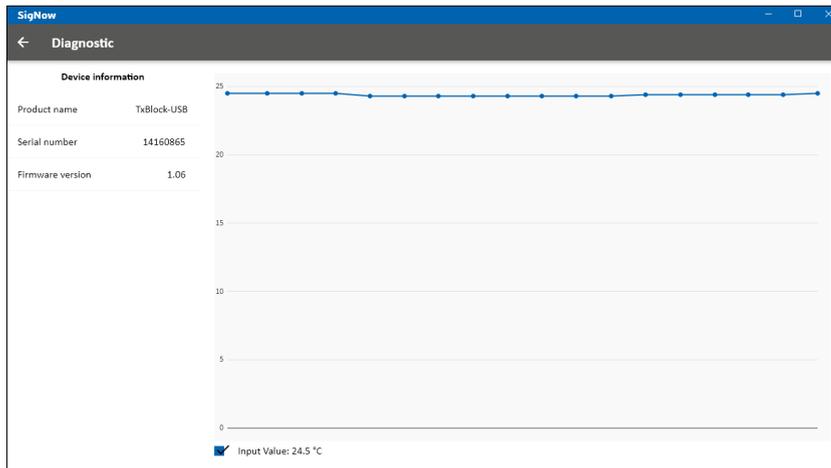

Figure 15 – Diagnostic

At the bottom of the graph, there are check boxes that allow you, in this case, to activate or deactivate the display of information about the input value: . This bottom bar also displays information about distance value, level value, or volume value, depending on the configured device.

In the **Advanced** section, if any, clicking the **Forcing** button allows you to force specific values in certain device parameters:

Figure 16 – Forcing values

Not all devices allow you to force values for testing.

7. OPEN CONFIGURATION

The **Open Configuration** button on the **SigNow** home screen will open the window shown in the figure below. It allows you to open a previously created configuration file, saved on a drive or in a network location:
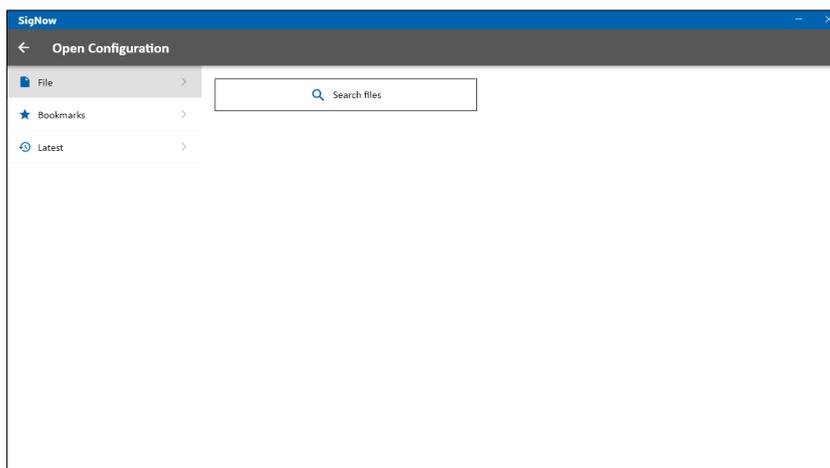

Figure 17 – Open configuration

To select a file, created through the **Create Configuration** section (see CREATE CONFIGURATION chapter), simply click on the **Search Files** button. You must select the file in the Windows window that appears next and click the **Open** button, which will allow you to view it in **SigNow**:
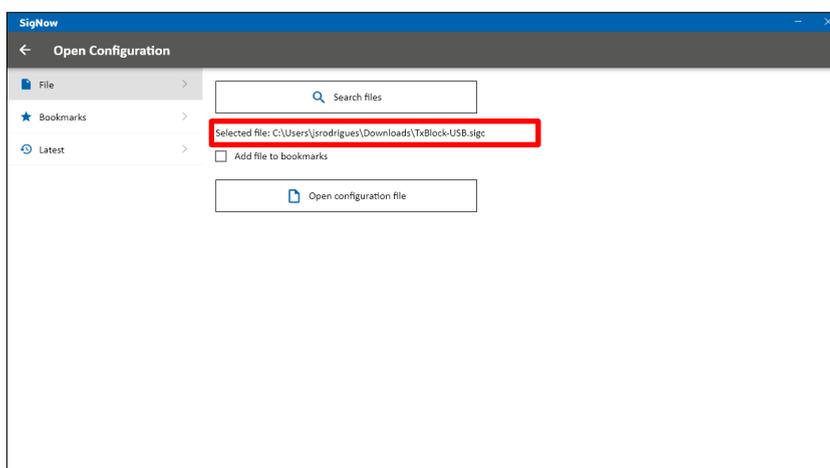

Figure 18 – Selecting a file

By clicking on the **Open configuration file** button, you can open this file.

By checking the **Add file to bookmarks** option on the above screen, you can view the file used in the **Bookmarks** section, as shown in the figure below:
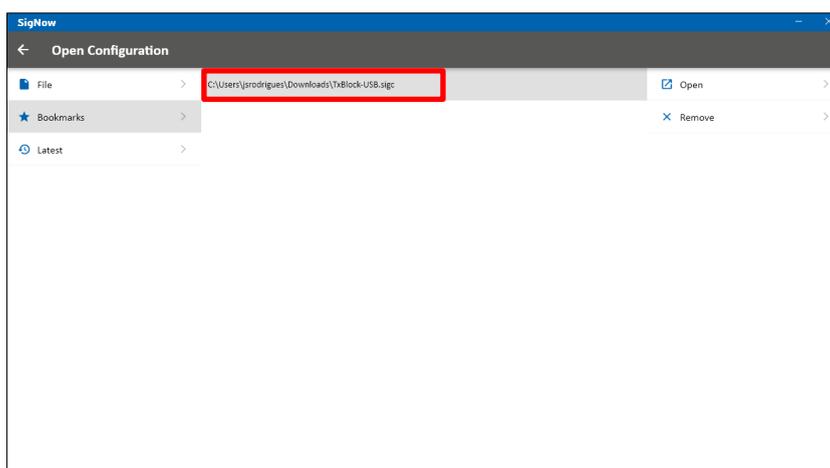

Figure 19 – Bookmarks

By clicking the **Open** button, you open the bookmarked file. By clicking the **Remove** button, you remove it from this list.

To select a recently accessed file, simply click the **Latest** button. There, you can also clear the list of recent files by clicking the **Remove** button. If you manually delete the file, **SigNow** will not be able to find it.

In any of the above cases, once the file to be edited has been selected, **SigNow** will redirect you to a configuration screen. You can see the details in the CREATE CONFIGURATION chapter.

8. CONNECTIONS

The **Connections** button on the **SigNow** start screen leads to the window shown in the picture below and allows you to open the connection manager:
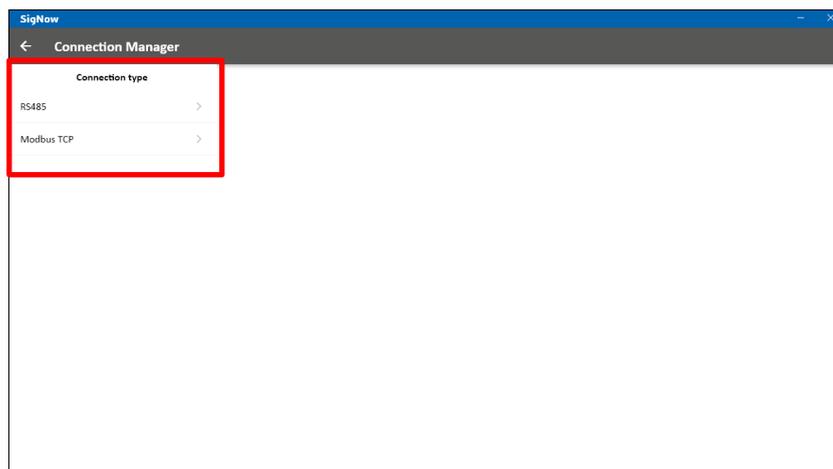

Figure 20 – Connections

In this screen you can manage the RS485 or Modbus TCP connection types previously created during the device reading process. Here, you can edit, save, or even remove the selected connection:
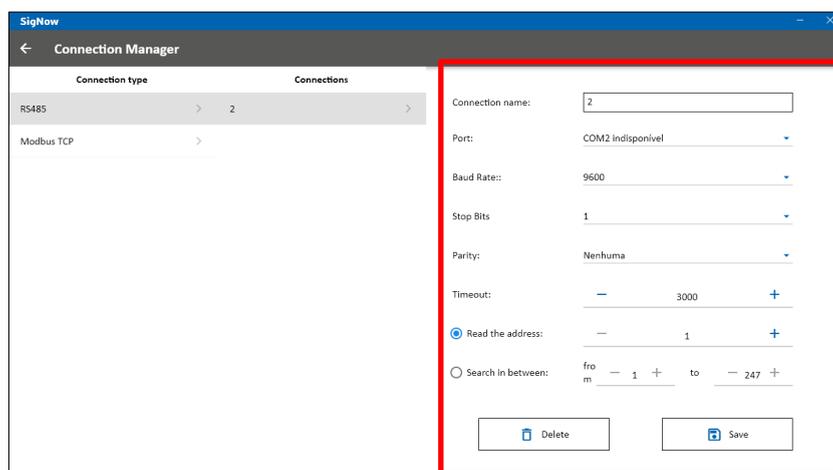

Figure 21 – Managing a connection

For more information about each parameter of either type of connection, see the RS485 and Modbus TCP sections of the CONFIGURATION chapter.

9.   FIRMWARE

This section allows you to update the firmware of the device connected to the selected COM port or to check online for new versions for the selected device:
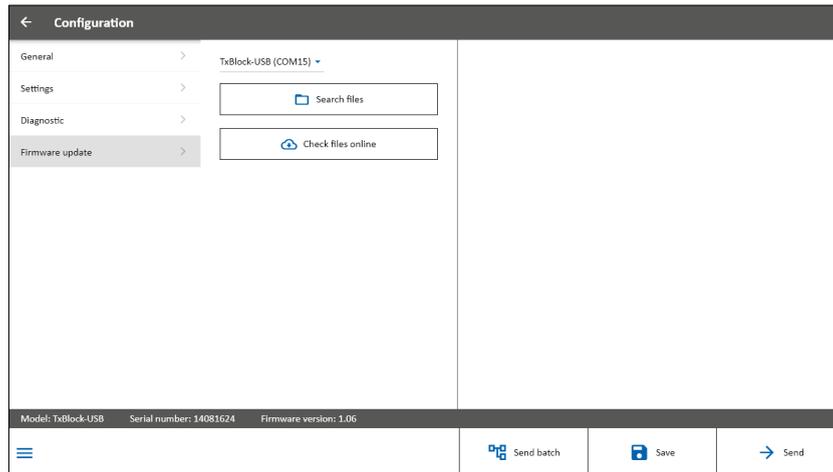

Figure 22 –   Firmware update

By clicking the **Search Files** button, you can select the file to be used from a specific folder on your computer. By clicking the **Check files online** button, you can select the device and update the firmware, as shown in the figure below:
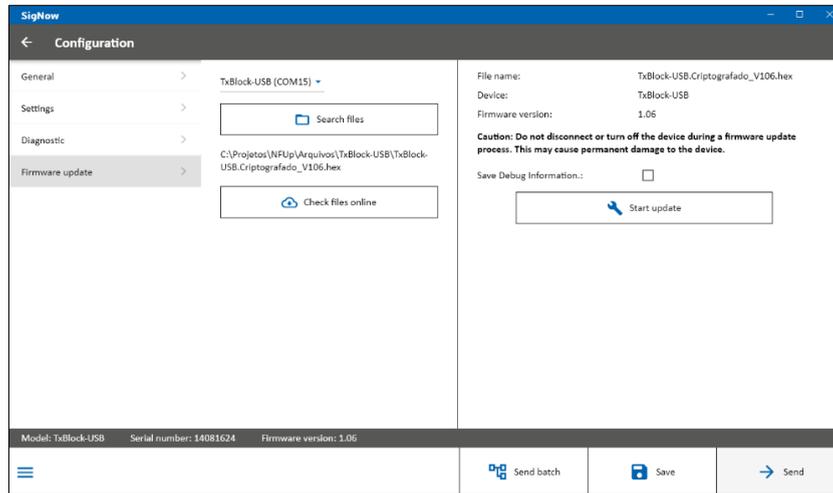

Figure 23 –   Checking files online

By clicking the **Start update** button, you can start the firmware update for the connected device, as shown in the figure below:
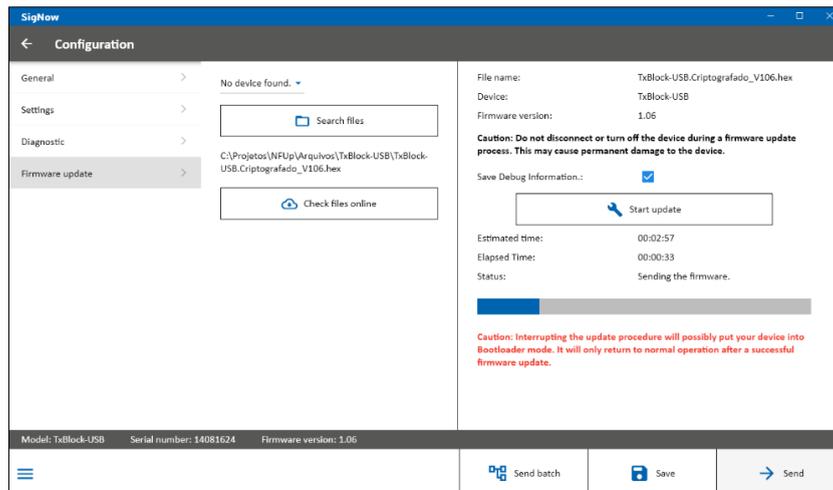

Figure 24 –   Firmware update process

While the firmware is being updated, **SigNow** will display a progress bar, which allows you to follow the process. It is important that no interruptions occur during this process. Otherwise, the device may experience problems.

If successful, **SigNow** displays a success message and completes the procedure.

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10.   SETTINGS

Besides allowing you to check for updates and view a list of compatible devices, this screen allows you to configure several usage preferences, as shown in the figure below:
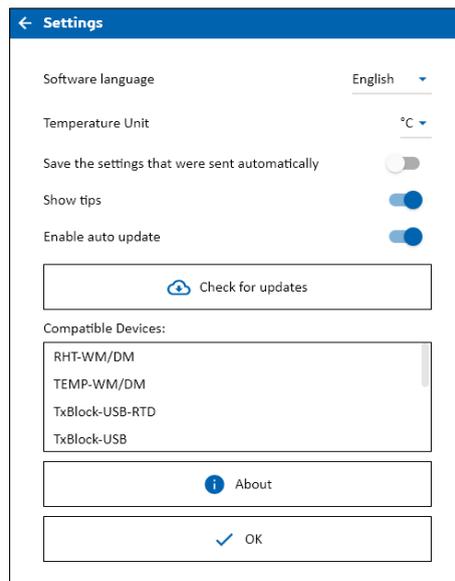

Figure 25 –   Settings screen

10.1   LANGUAGE

- This option allows you to select the software language: Portuguese, English, Spanish, or French.

10.2   TEMPERATURE UNIT

- This option allows you to select the standard temperature unit of the software.

10.3   CONFIGURATION FILES

- **Save settings that were sent automatically:** While configuring a device in the **Configuration** section, **SigNow** will save the changes made whenever you switch screens.

10.4   SHOW TIPS

- When enabled, this option allows the software to show some tips.

10.5   UPDATE

- **Enable auto update:** If checked, this option allows the software to automatically check for updates. Otherwise, you can click the **Check for updates** button to manually check for updates.

    This feature requires an active Internet connection.

    Regardless of the option you choose, either through the **Enable auto update** option or through the **Check for updates** button, **SigNow** will display a pop-up, informing you that there is a new update.

    By clicking the **Download latest version** option, you will automatically download the latest version, which must be manually installed. By clicking the **Cancel** option, the software will close the pop-up, allowing you to return to the **SigNow** navigation.

    If the software is already up-to-date or there is no Internet connection to download any available update, **SigNow** will display a warning pop-up.

10.6   COMPATIBLE DEVICES

- This section displays the **NOVUS** devices compatible with **SigNow**.

⚠️	Due to the use of the TxConfig-USB interface, when any combination of TxBlock-USB, TxRail-USB, TxIsoRail, TxBlock-HRT, TxRail-HRT, Temp WM/DM, RHT-WM/DM, RHT Climate, NP785, NP640, TxMini-M12, or TxMini-DIN devices are plugged into the computer at the same time, the software will recognize only one of them. Therefore, it is recommended to use only one TxConfig-USB Interface at a time.

10.7   ABOUT

- This section displays information about the software.