



Software Manual

Baumer Sensor Suite Manual

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1 Purpose of this document

This document contains information about the software "Baumer Sensor Suite" (BSS) and is intended to help with the installation of the software and to improve the setup process. It also provides general information about the functions of the Baumer Sensor Suite. Furthermore, it contains detailed information about the connection and use of IO-Link devices such as sensors or masters in the BSS.

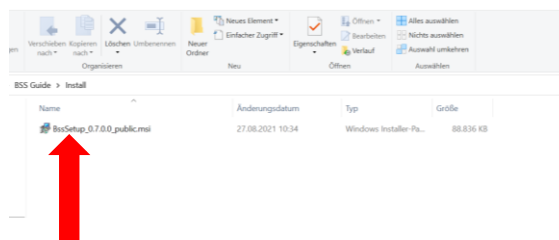
Manufacturer:

Baumer Electric AG CH-8501 Frauenfeld
Phone +41 (0)52 728 1122
Fax +41 (0)52 728 1144

2 Installation

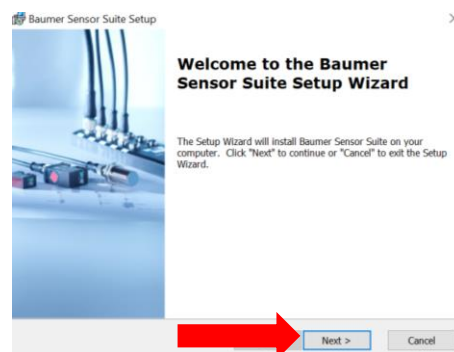
2.1 Start Installer

To start the installation, doubleclick on the setup file "BssSetup_1.0.3.0_public.msi"



2.2 Setup Wizard

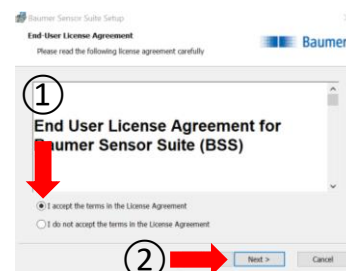
The Setup Wizard will start automatically. Click on "Next"



2.3 Accept End-User License Agreement

Read the "End-User License Agreement" carefully and if you agree to it:

- 1.) Click on the checkbox "I accept the terms in the License Agreement"
- 2.) Then click on the button "Next"



2.4 Choose Installation Type

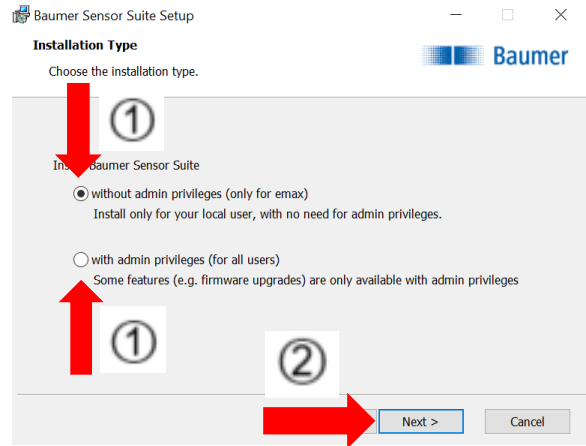
You can choose between an installation with administrator rights or an installation without administrator rights.

1.) When installing with admin rights, the software is installed for all users and you have the option to install device drivers as well. The device drivers are required for example to update the firmware of a master. Depending on the Windows / IT settings, you may need to enter the admin username and password.

or...

1.) In the installation without administrator rights, the software is only installed for your user and it is not possible to install specific device drivers. Even without these device drivers, the software is fully functional.

2.) Select one of the two options and click on the "Next" button.

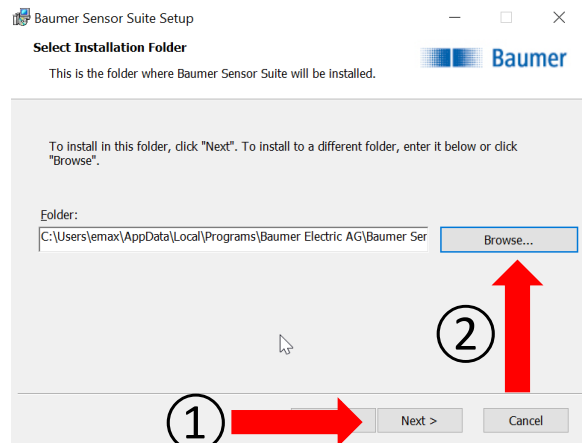


2.5 Select Installation Folder

Now you can select the installation location of the software:

1.) By clicking on the button "next", the BSS will be saved automatically under the default installation path. We recommend to use that option.

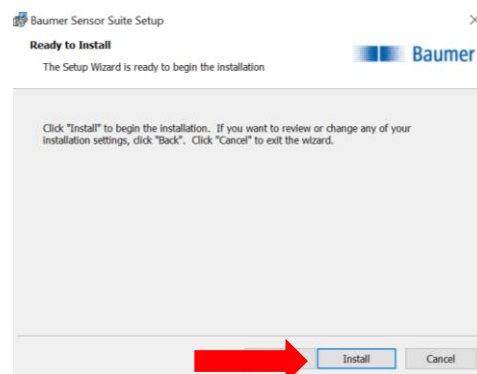
2.) Alternatively, you can click on the button "Browse", which opens a file directory and you can select the desired installation location. Then you also have to press the "next" button



2.6 Ready to Install

To install the BSS now, just click on the "Install" button.

The installation will start automatically and may take a few minutes.

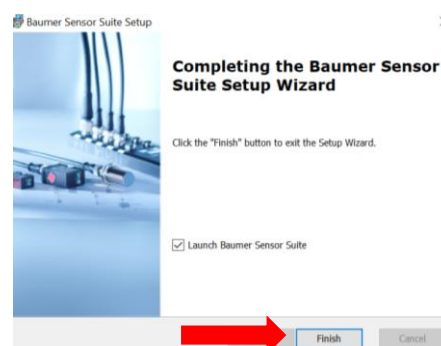


2.7 Finish Installation

The software is now successfully installed.

If you check the box "Launch Baumer Sensor Suite", the software will be launched automatically after the installation.

To finish the installation, click on the button "Finish".



3 First Start of the BSS

3.1 Start Baumer Sensor Suite

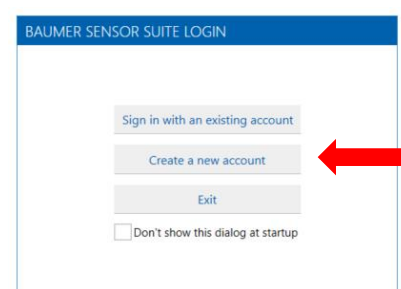
To start the software, double click on the BSS Icon.



3.2 Start Registration

To register for the BSS you have to click on "Create a new account".

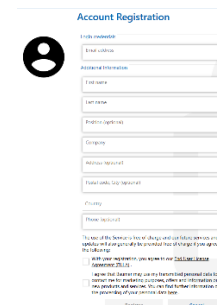
For the registration and login, you need an internet connection.



3.3 Registration

Please fill in your data, accept the “EULA” and the data privacy and click “Register” at the end.

If the step fails, please write an e-mail to support.bss@baumer.com

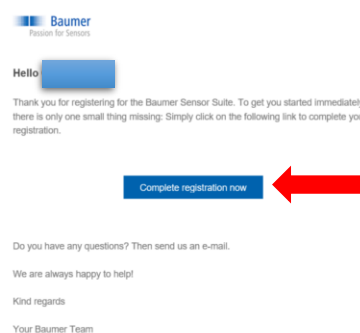


3.4 Finish Registration

You will receive an email from noreply@baumer.com

Please click on the blue button “Complete registration now”

After that please go back to the Baumer Sensor Suite

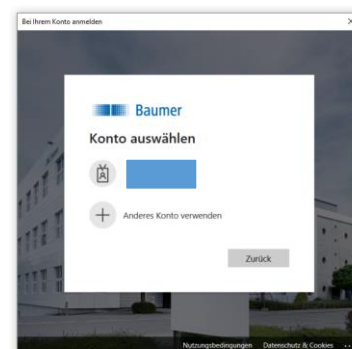


3.5 BSS Login

Back in the BSS please click on "Sign in with an existing account”

Type in your Mail address and press continue.

The registration is complete and you are now ready to use the BSS

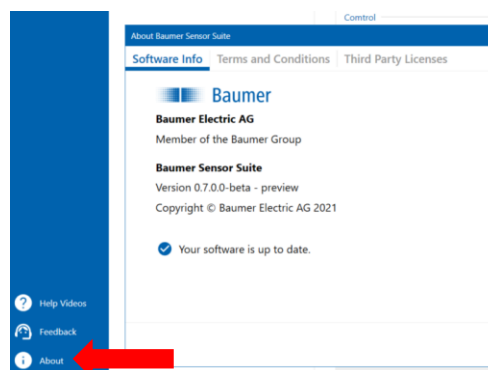


4 Update Software

Before you get started it is advisable to check for updates.

To update the software please press “About” in the lower left corner. Now the BSS automatically checks for updates. If there is an update available, just press “Install”.

After the installation please restart the BSS. You now have the latest version and are ready to use the BSS.



5 General Information

5.1 General overview

The left column provides a selection of the different apps.

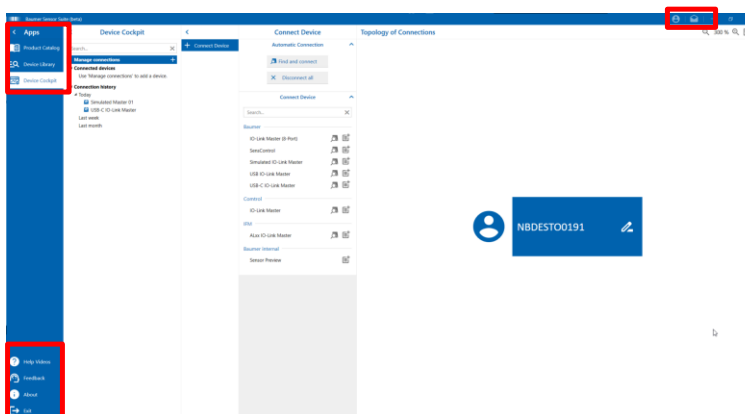
Under the app "Product Catalog" you can see all supported Baumer devices. With a click on the product, the rough information of the corresponding product will open, you will see the name and article number of the product and you can send a request to Baumer via the "Request" button to get more detailed information.

Under the app "Device Library" you can view, manage, update, add or remove IOdds. You also have the possibility to view information, process data and parameters of the sensor.

Under the app "Device Cockpit" you can manage your connections, connect or disconnect a device and have the possibility to view the sensor data in different tools and make parameter settings.

In the lower left corner, there are buttons that direct you to help videos, give you the option of feedback, and provide information about the software and updates.

In the upper right corner you can manage your account and see notifications.

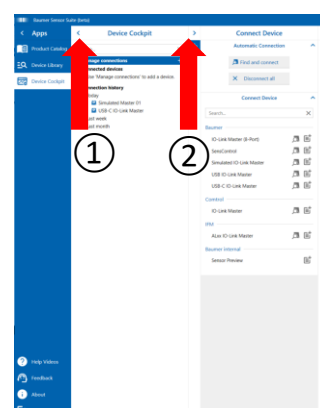


5.2 Collaps tabs

To get a clearer and larger presentation of the relevant information, you can collapse tabs that are not needed.

1.) This is done by clicking on the icon with the arrow pointing to the left. Just click on the icon and the corresponding tab will be collapsed.

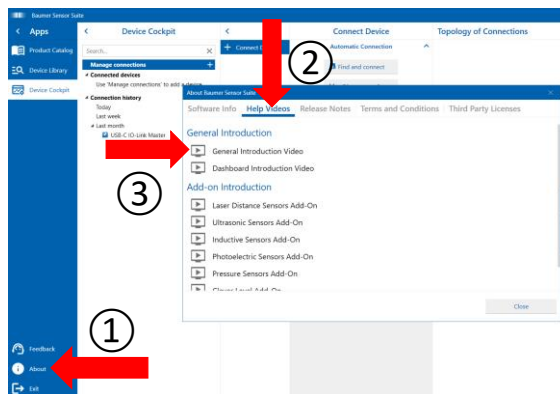
2.) To open it again, click on the button with the arrow pointing to the right.



5.3 Help Videos

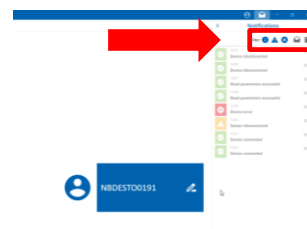
There are general help videos to help you get started with the BSS and help videos for the add-ons of the different sensors. To watch the videos you need an internet connection.

- 1.) You can find the videos in the lower left corner. Click on the button "About".
- 2.) Then clicking on the button "Help Videos" opens a window with an overview of all available videos.
- 3.) To watch a video, just click on the video icon and you will be automatically redirected to the video.



5.4 View messages

To see your notification, click on the button with the letter symbol. You can either show all notifications or choose between the notification types "Info message", "Warnings" and "Errors". You can also mark the notifications as read and delete them.

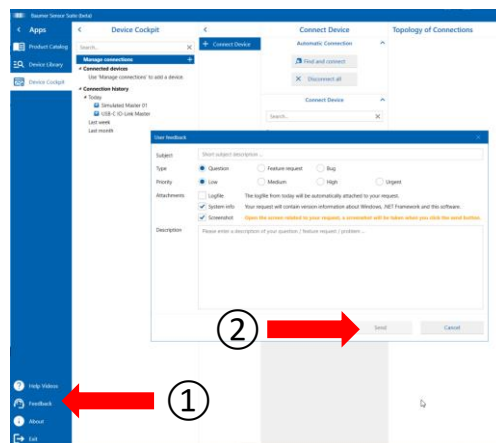


5.5 Send Feedback and Bug Reports

If you have a problem with the BSS, there is a possibility to send feedback.

- 1.) To do this, click on the "Feedback" button in the lower left corner.
- 2.) This will open a window for user feedback. You can leave a short description of the problem, the type of the problem, priority and you can choose if the logfile, system information and a screenshot should be sent automatically. Finally click on the button "Send".

Your feedback helps us to improve the software. We are looking forward to your feedback.

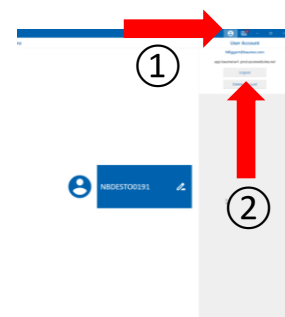


5.6 Log-out from BSS

To log out from the BSS:

- 1.) Click on the "User" button in the upper right corner.
- 2.) Click on the "Logout" button

In order to log in again afterwards, you need an internet connection. Further information at **BSS Login**.

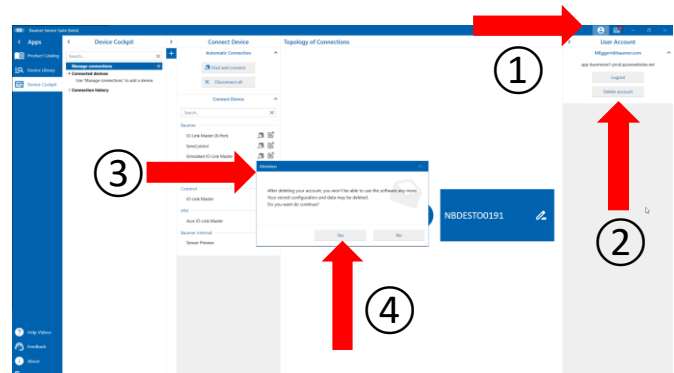


5.7 Delete Account

After you have deleted the account, the BSS can no longer be used.

To delete your account at BSS:

- 1.) Click on the "User" button in the upper right corner.
- 2.) Click on the "Delete account" button
- 3.) Then a button pops up with a warning message that when deleting the account the BSS can no longer be used and saved settings can be lost
- 4.) If you definitive want to delete the account, click on the button "Yes".



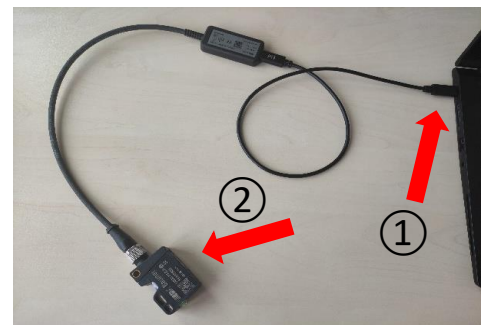
6 Connect IO-Link Devices

6.1 Baumer USB-C IO-Link Master

6.1.1 Hardware Configuration of the Baumer USB-C IO-Link Master and Sensor

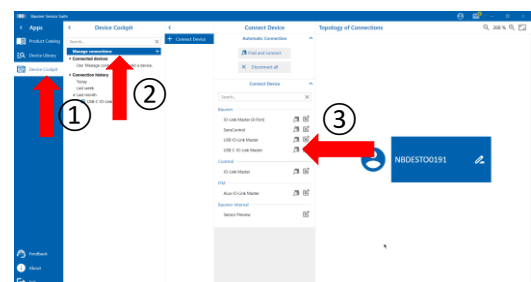
- 1.) Plug the Baumer USB-C IO-Link Master into the USB-C port of your device
- 2.) Connect the desired sensor with the other side of the Baumer USB-C IO-Link Master.

Now the hardware configuration is completed and we will look at how to connect the Baumer USB-C IO-Link Master and sensor with the BSS



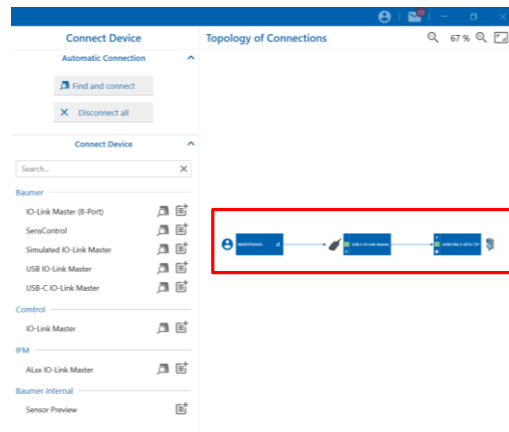
6.1.2 Connect the Baumer USB-C IO-Link Master to BSS

- 1.) To connect to the BSS, make sure you are on the "Device Cockpit" tab on the left of the app selection.
- 2.) Then click on "Manage connections".
- 3.) Under the "Connect Device" tab, click on the left button (magnifier icon) next to the "USB-C IO-Link Master" line.

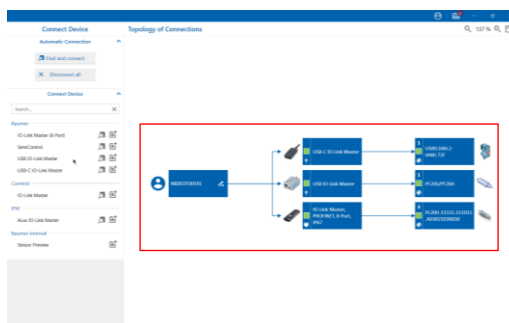


6.1.3 Successfully connected

The BSS automatically establishes the connection to the devices. Afterwards you can see a topology of all successfully connected devices on the right side.



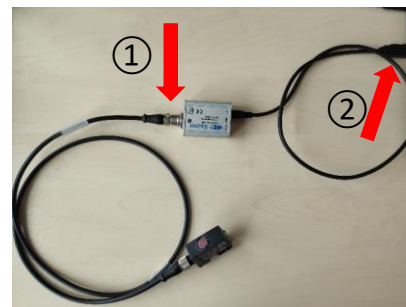
You also have the possibility to connect several masters at the same time. These are all listed in the topology.



6.2 Baumer USB IO-Link Master

6.2.1 Hardware Configuration of the Baumer USB IO-Link Master

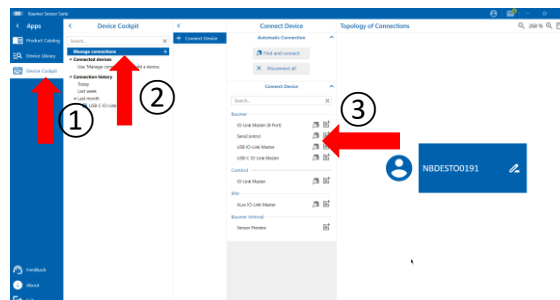
- 1.) Connect the desired sensor with the Baumer USB IO-Link Master.
- 2.) Plug the Baumer USB IO-Link Master into the USB port of your device.



Now the hardware configuration is complete and you are ready to connect the master and the sensor to the BSS

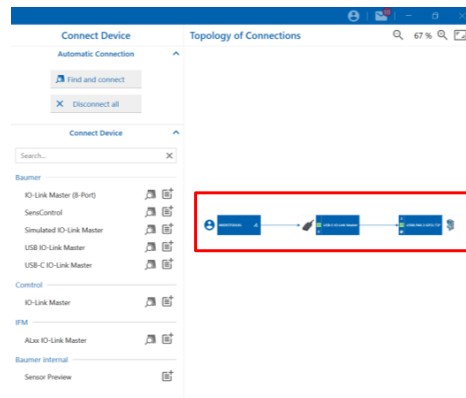
6.2.2 Connect the Baumer USB IO-Link Master to BSS

- 1.) To connect to the BSS, make sure you are on the "Device Cockpit" tab on the left of the app selection.
- 2.) Then click on "Manage connections".
- 3.) Under the "Connect Device" tab, click on the left button (magnifier icon) next to the "USB IO-Link Master" line.



6.2.3 Successfully connected

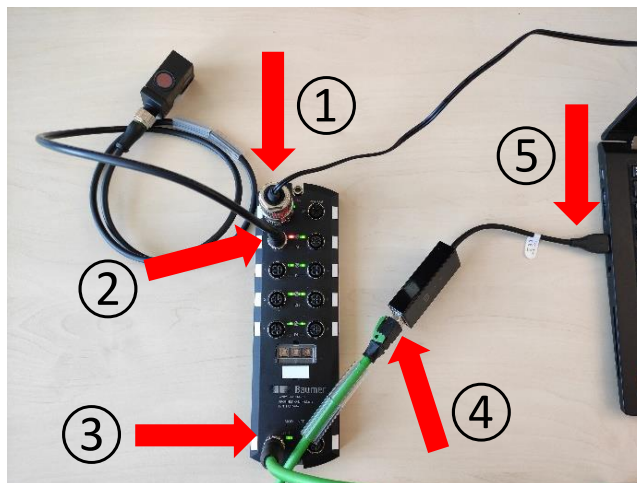
The BSS automatically establishes the connection to the devices. Afterwards you can see a topology of all successfully connected devices on the right side.



6.3 Baumer 8-Port IO-Link Master

6.3.1 Hardware Configuration of the Baumer 8-Port IO-Link Master

- 1.) Connect the power cable to the "PWR In" port of the master. Then plug the power supply into the socket.
- 2.) Connect the sensor to the desired port of the Baumer 8-Port IO-Link Master
- 3.) Connect the Ethernet cable to the "ETH 1" port of the Baumer 8-Port IO-Link Master.
- 4.) Plug the Ethernet connector of the cable into the Ethernet port of the USB adapter.
- 5.) Then plug the USB connector into your device.

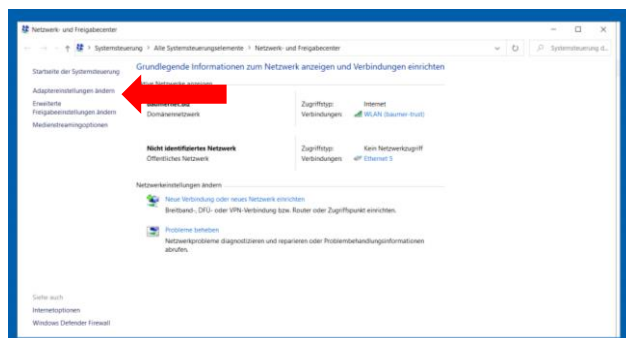


6.3.2 Assigning IP Address

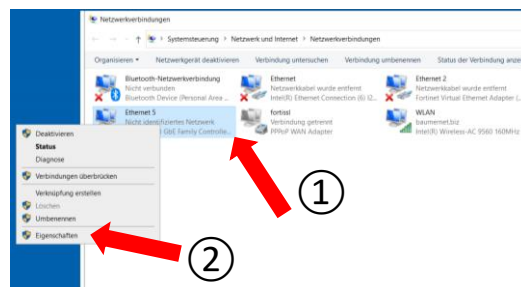
Before you can connect the Baumer 8-Port IO-Link Master and BSS, you have to change the configuration. First you have to get a connection between the master and your computer.

To get a connection between the master and your computer, you need to assign an IP Address to your computer first. Therefore open your settings:

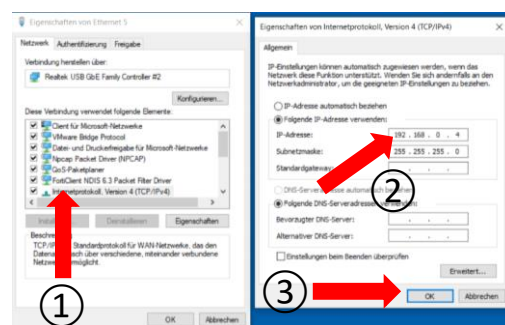
„Settings“ → „Network and Internet“ → „Network and Sharing Center“ → „Change adapter settings“



- 1.) Right-click on the adapter to which the Baumer 8-Port IO-Link Master is connected. In this example „Ethernet 5“
- 2.) Press the button “Properties” and type in your password. At this point you might need administrator rights or you might use the DHCP Switch software instead.



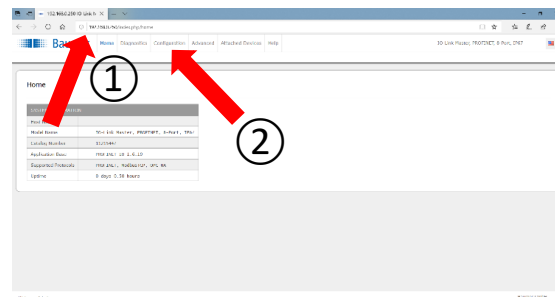
- 1.) Double-click on “Internetprotokoll, Version 4 (TCP/IPv4)”
- 2.) Type in an IP address, which is in the same range as the IP address of the Baumer 8-Port IO-Link Master. For example: 192.168.0.4
- 3.) Submit the entry by clicking on the “OK” button



6.3.3 Accessing Webserver of 8-Port IO-Link Master

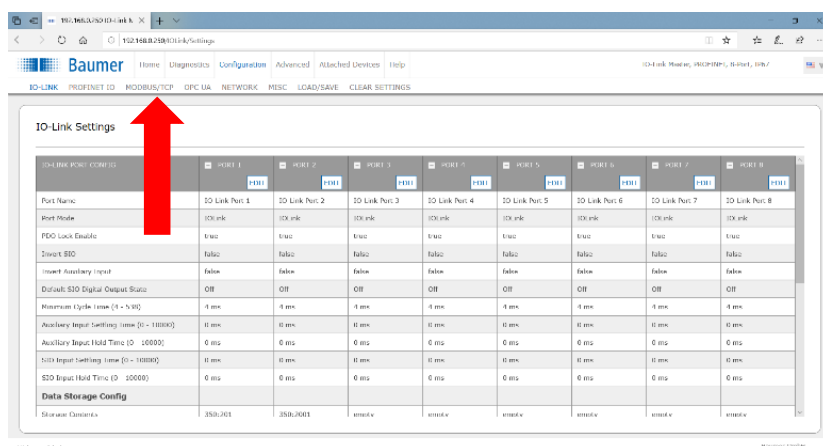
To change the configuration, please call the webserver of the Baumer 8-Port IO-Link Master

- 1.) Go to your browser and type in the default IP address of the Baumer 8-Port IO-Link Master into the search field: **192.168.0.250**. If you have assigned an individual IP address to the master in the past, you must enter this instead. Confirm with “Enter”. Now you will be automatically redirected to the web server.



- 2.) On this page please click on the button “Configuration”

Please click on the button “MODBUS/TCP” now.

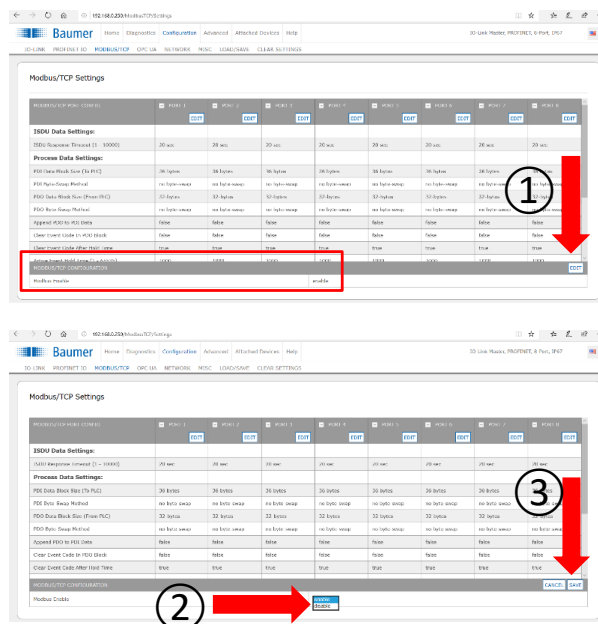


6.3.4 Enable "MODBUS/TCP"

Make sure that the setting "MODBUS/TCP Configuration" is set to "Enable".

If this is not the case:

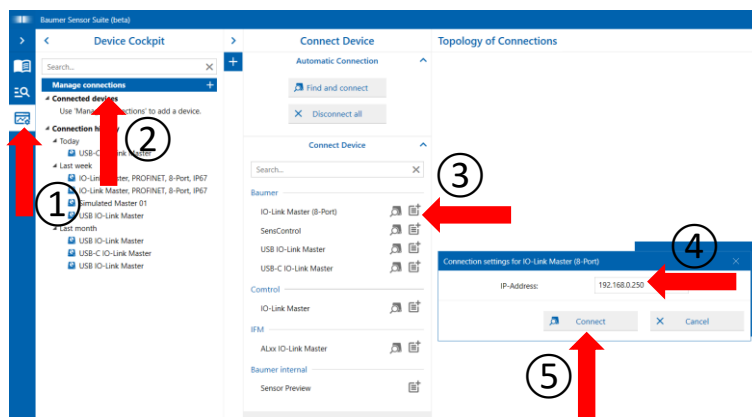
- 1.) click on the button "EDIT"
- 2.) Press the selection arrow, and click on "Enable"
- 3.) Save the setting by clicking on the "SAVE" button.



6.3.5 Connecting to BSS

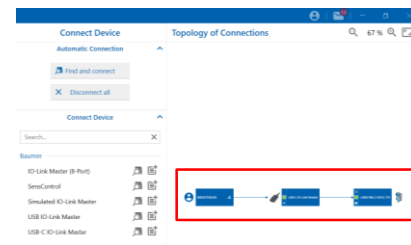
The 8-port IO-Link master is now ready to connect to the BSS. To do this, please go back to the BSS.

- 1.) Make sure you are on the "Device Cockpit" tab on the left of the app selection.
- 2.) Then click on "Manage connections"
- 3.) Under the "Connect Device" tab, click on the right button next to the "IO-Link Master (8-port)" line. Then enter the IP address of the Baumer 8-Port IO-Link Master and click on "Connect" (Default IP address: 192.168.0.250).



6.3.6 Successfully connected

The BSS automatically establishes the connection to the devices. Afterwards you can see a topology of all successfully connected devices on the right side.



6.4 SensControl

6.4.1 Hardware configuration of SensControl

- 1.) Connect the sensor to the "Device" port of the SensControl
- 2.) Switch on the SensControl with a long press (~ 1 Sec.) of the "Mode" button

The LEDs of the SensControl all light up red once briefly before LED 1 flashes blue and LED 2 lights up green. This means that the SensControl is providing a WiFi connection and has detected the connected sensor. It is ready for pairing now.

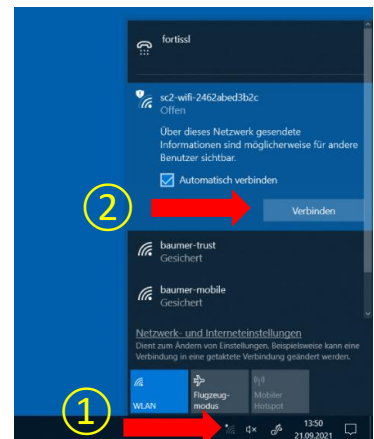


For further information, please refer to the manual of the SensControl.

6.4.2 Establish WiFi connection between SensControl and computer

On the back of your SensControl you will see a sticker with important information such as "Serial number" and "Device name". There is also a line "Default WiFi SSID:". You need this WiFi SSID for the next step.

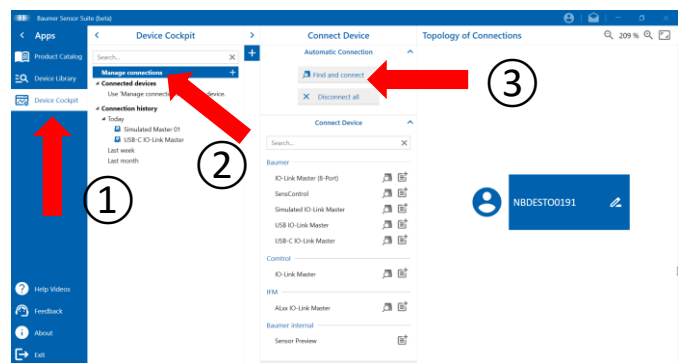
- 1) Click on the Internet icon in the taskbar of your computer.
- 2.) The SSID of your SensControl will appear in the list of available WiFi networks. Click on it and press the button "Connect". Your computer will now automatically establish a WiFi connection to the SensControl. If the connection is successful, the LED1 will blink red.



6.4.3 Connecting to BSS

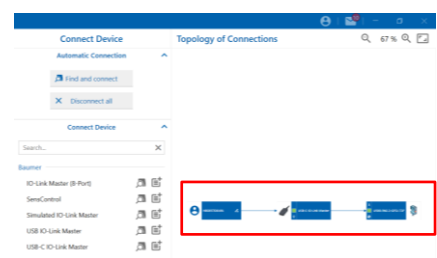
The SensControl is now ready to connect to the BSS. To do this, go back to the BSS.

- 1.) To connect to the BSS, make sure you are on the "Device Cockpit" tab on the left of the app selection.
- 2.) Then click on "Manage connections"
- 3.) Under the tab "Connect Device" click on "Find and connect".



6.4.4 Successfully connected

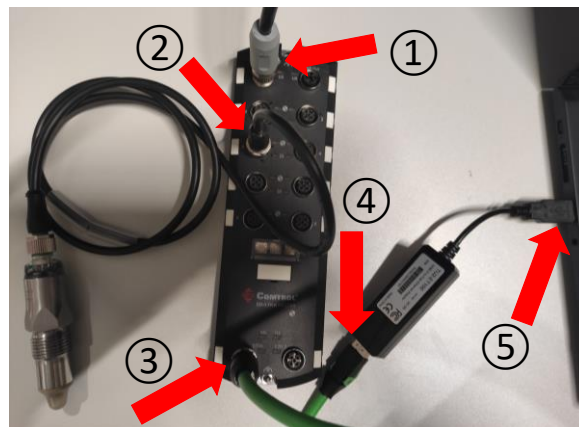
Now the BSS automatically establishes the connection to the devices. Afterwards you can see a topology of all successfully connected devices on the right side.



6.5 Control IO-Link Master

6.5.1 Hardware Configuration of Control IO-Link Master

- 1.) Connect the power cable to the "PWR In" port of the master. Then plug the power supply into the socket.
- 2.) Connect the sensor to the desired port of the Control IO-Link Master
- 3.) Connect the Ethernet cable to the "ETH 1" port of the Control IO-Link Master.
- 4.) Plug the Ethernet connector of the cable into the Ethernet port of the USB adapter.
- 5.) Then plug the USB connector into your device.

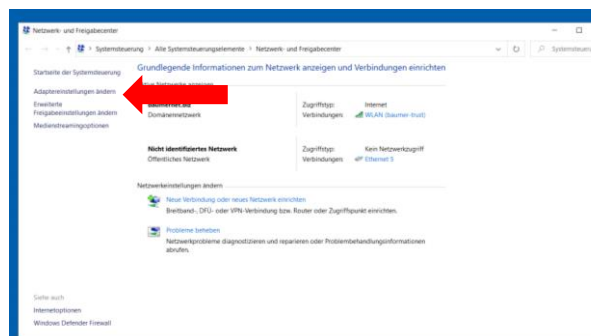


6.5.2 Assigning IP Address

Before you can connect the Control IO-Link Master and BSS, you have to change the configuration. First you have to get a connection between the master and your computer.

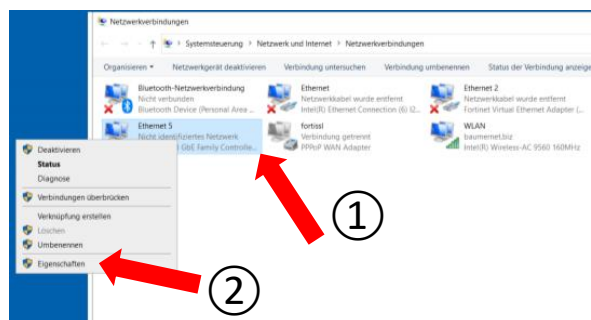
To get a connection between the master and your computer, you need to assign an IP Address to your computer first. Therefore open your settings:

„Settings“ → „Network and Internet“ → „Network and Sharing Center“ → „Change adapter settings“

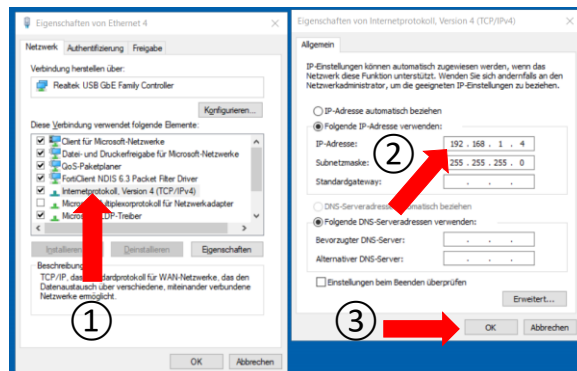


1.) Right-click on the adapter to which the Control IO-Link Master is connected. In this example „Ethernet 5“

2.) Press the button “Properties” and type in your password. At this point you may need administrator rights



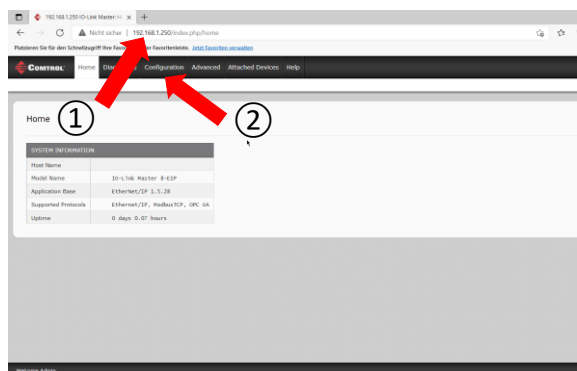
- 1.) Double-click on “Internetprotokoll, Version 4 (TCP/IPv4)”
- 2.) Type in an IP address, which is in the same range as the IP address of the Control IO-Link Master. For example: 192.168.1.4
- 3.) Submit the entry by clicking on the “OK” button



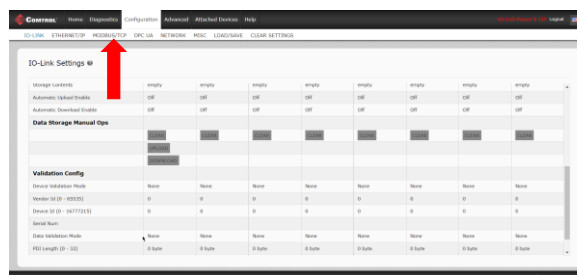
6.5.3 Accessing Webserver of Control Master

To change the configuration, please call the webserver of the Control IO-Link Master

- 1.) Go to your browser and type in the default IP address of the Control IO-Link Master into the search field: 192.168.1.250. If you have assigned an individual IP address to the master in the past, you must enter this instead. Confirm with “Enter”. Now you will be automatically redirected to the web server.
- 2.) On this page please click on the button “Configuration”



Please click on the button “MODBUS/TCP” now.

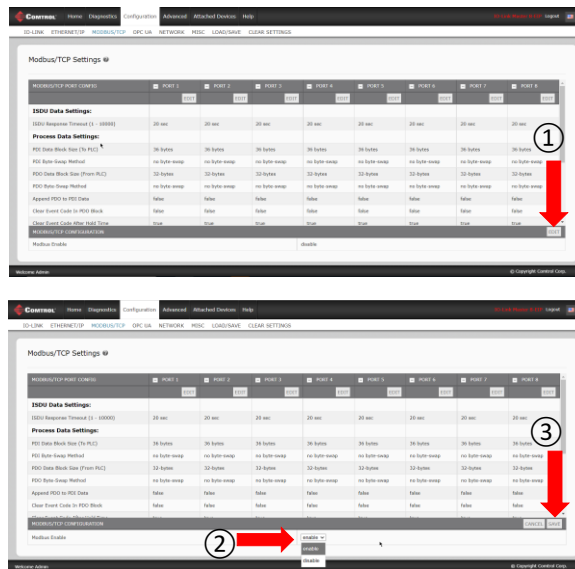


6.5.4 Enable “MODBUS/TCP”

Make sure that the setting "MODBUS/TCP Configuration" is set to "Enable".

If this is not the case:

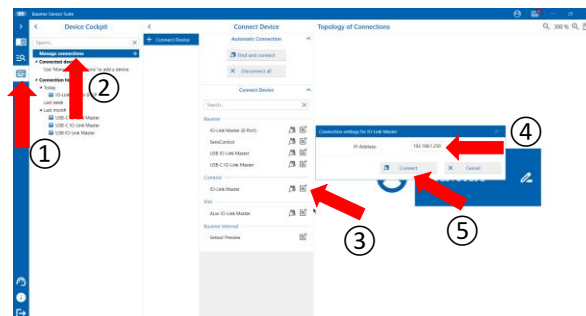
- 1.) Click on the button "EDIT"
- 2.) Press the selection arrow, and click on "Enable"
- 3.) Save the setting by clicking on the "SAVE" button.



6.5.5 Connecting to BSS

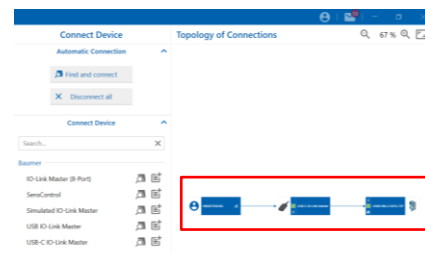
The Control IO-Link Master is now ready to connect to the BSS. To do this, please go back to the BSS.

- 1.) Make sure you are on the “Device Cockpit” tab on the left of the app selection.
- 2.) Then click on "Manage connections"
- 3.) Under the "Connect Device" tab, click on the right button next to the "Control IO-Link Master" line. Then enter the IP address of the Control IO-Link Master and click on "Connect" (Default IP address: 192.168.1.250).



6.5.6 Successfully connected

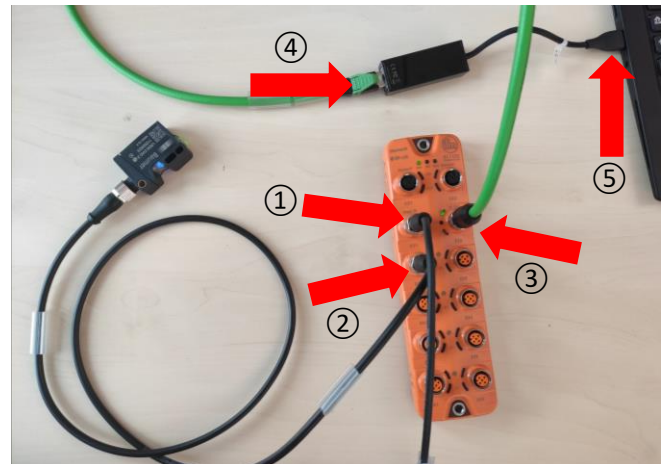
The BSS automatically establishes the connection to the devices. Afterwards you can see a topology of all successfully connected devices on the right side.



6.6 IFM IO-Link Master

6.6.1 Hardware Configuration of IFM IO-Link Master

- 1.) Screw the power cable to the "Power IN" port of the master. Then plug the power supply into the socket.
- 2.) Screw the sensor to the desired port of the master
- 3.) Screw the Ethernet cable to the "IoT Port" of the IFM IO-Link Master.
- 4.) Plug the Ethernet connector of the cable into the Ethernet port of the USB adapter.
- 5.) Then plug the USB connector into your device

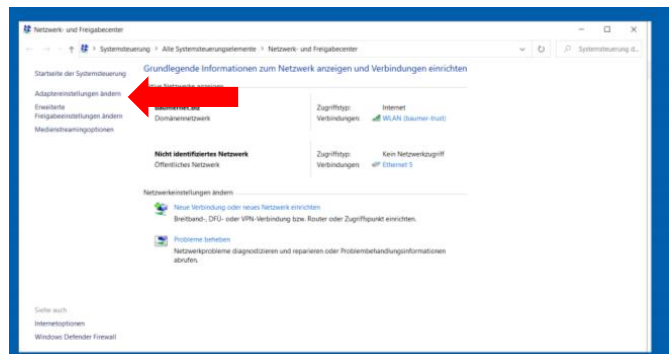


6.6.2 Assigning IP Address

Before you can connect the IFM IO-Link Master and BSS, you have to change the configuration. First you have to get a connection between the IFM IO-Link Master and your computer.

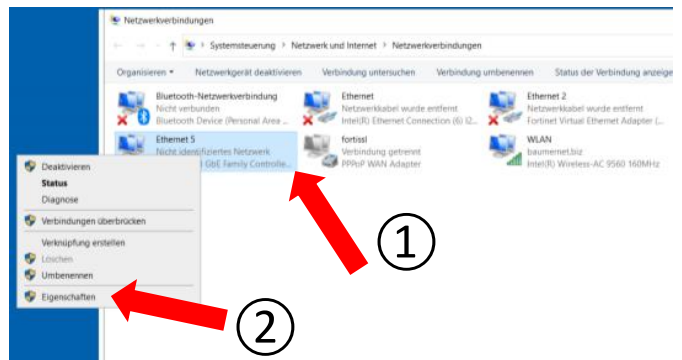
To get a connection between the master and your computer, you need to assign an IP Address to your computer first. Therefore open your settings:

„Settings“ → „Network and Internet“ → „Network and Sharing Center“ → „Change adapter settings“

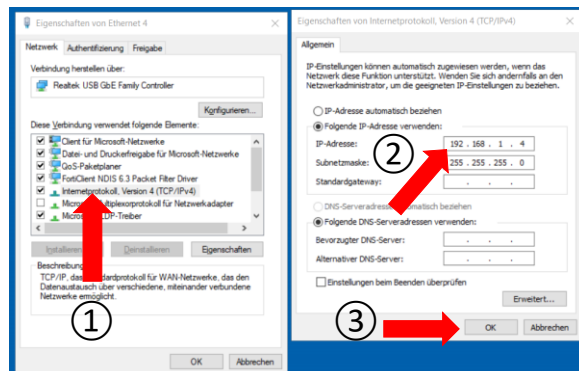


1.) Right-click on the adapter to which the IFM IO-Link Master is connected. In this example „Ethernet 5“

2.) Press the button “Properties” and type in your password. At this point you may need administrator rights



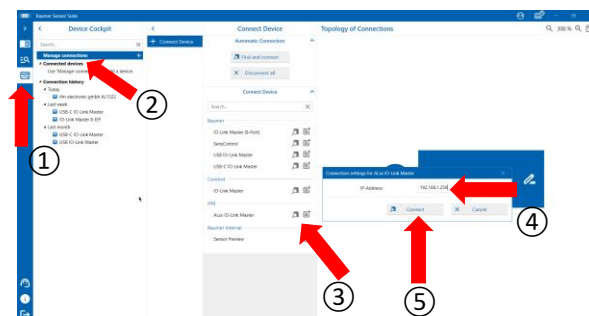
- 1.) Double-click on "Internetprotokoll, Version 4 (TCP/IPv4)"
- 2.) Type in an IP address, which is in the same range as the IP address of the IFM IO-Link Master. For example: 192.168.1.4
- 3.) Submit the entry by clicking on the "OK" button



6.6.3 Connecting to BSS

The IFM IO-Link Master is now ready to connect to the BSS. To do this, please go back to the BSS.

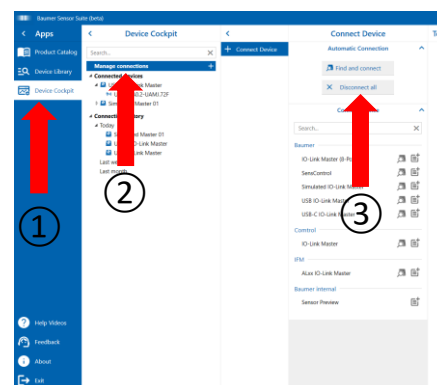
- 1.) Make sure you are on the "Device Cockpit" tab on the left of the app selection.
- 2.) Then click on "Manage connections"
- 3.) Under the "Connect Device" tab, click on the right button next to the "IFM ALxx IO-Link Master" line. Then enter the IP address of the IFM IO-Link Master and click on "Connect" (Default IP address: 192.168.1.250).



6.7 Disconnect all devices

You have the possibility to disconnect all connected devices with one click.

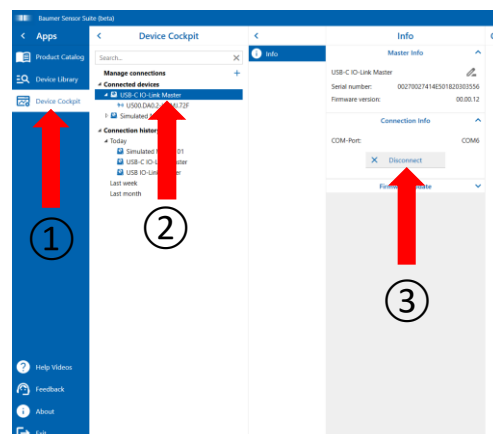
- 1.) Make sure you are in the app selection on the left in the tab "Device Cockpit"
- 2.) Click on the button "Manage connections"
- 3.) Now you come to the tab "Connect Device". Here you click on "Disconnect all".



6.8 Disconnect a single master

You also have the option to disconnect only a specific master

- 1.) Make sure you are in the app selection on the left in the tab "Device Cockpit"
- 2.) Click on the master you want to disconnect
- 3.) You will now get to the "Info" tab of this master. By clicking on the button "Disconnect" only this master and the connected sensors will be disconnected.

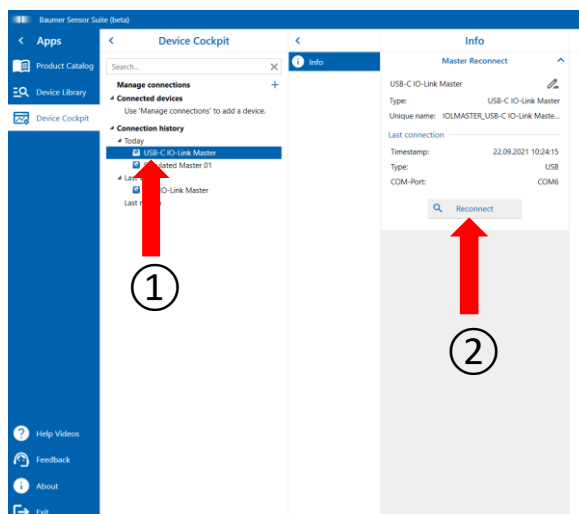


6.9 Reconnect a master

Previously connected masters are displayed in the "Device Cockpit" under the "Connection history". To reconnect one of these masters, make sure that the corresponding master is plugged into your computer.

- 1) Click on the master you want to reconnect in the "Device Cockpit" under the subtab "Connection history"
- 2.) The "Info" tab of the master will open. Click on the button "Reconnect".

The connection to the master is now automatically re-established. This option reconnects the master faster than the "Find and connect" option, because it does not search for all devices.

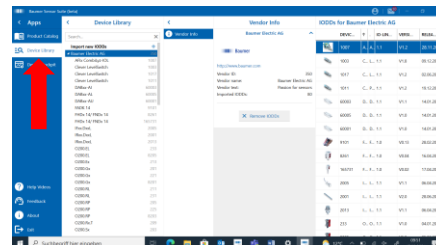


7 Find and Import IODD

7.1 Baumer IODD

If you are using a Baumer sensor, the IODD is already stored in the BSS.

You can get an overview of all stored IODDs under the tab "Device library" on the far left.

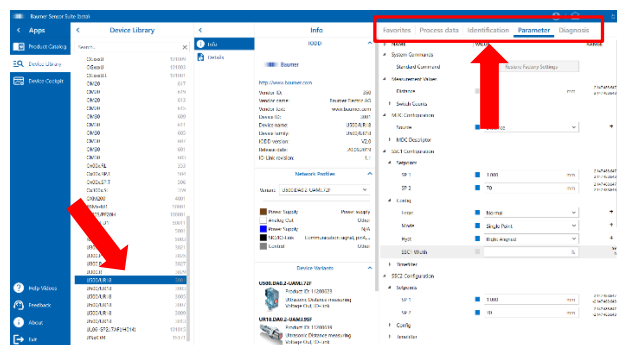


7.2 Orientation in IODD Table

By clicking on a device in the list, you will get to the corresponding IODD.

Here you can view several information and change parameters.

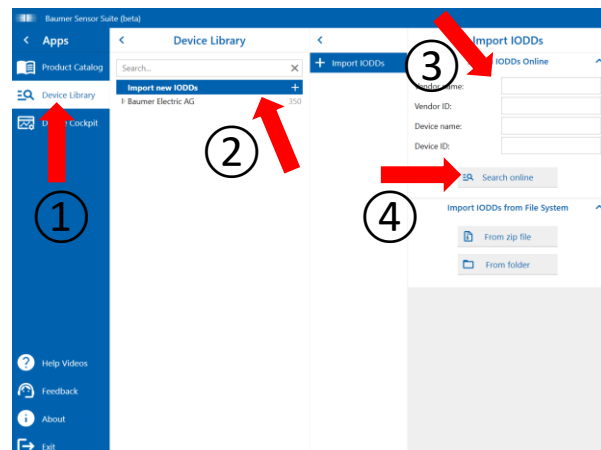
You can also save important data under favorites by pressing the right mouse button and then clicking on "pin".



7.3 Search IODD

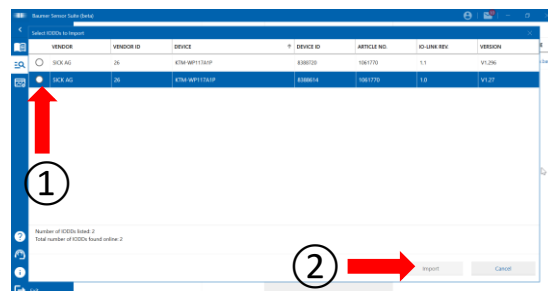
To import the IODD of another manufacturer:

- 1.) Go to the tab "Device library" on the far left.
- 2.) Then click on the button "Import new IODD`s".
- 3.) In the field "Search IODD`s online" you can now search for the IODD of your device by Vendor name, Vendor-ID, Device name and Device-ID.
- 4.) Then press the button "Search online".



7.4 Import IODD of other manufacturer

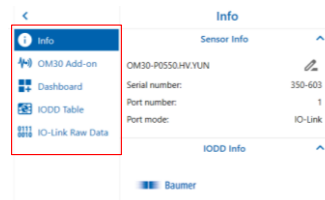
Then the corresponding IODD is displayed. Now select the IODD with a check mark and click on the "Import" button. The IODD is now in the tab "Device library".



8 Device Cockpit

8.1 General

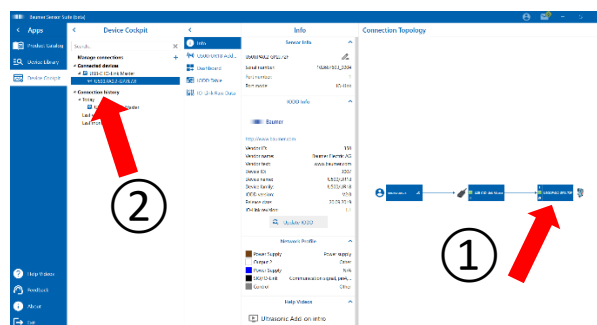
From here you can see general information about the sensor and switch to the Dashboard or Add-On.



8.2 How to get there

You will get to the sensor Functions

- 1.) Either by double clicking on the sensor in the topology or
- 2.) By clicking on the listed sensor in the "Device cockpit" under the tab "connected devices".

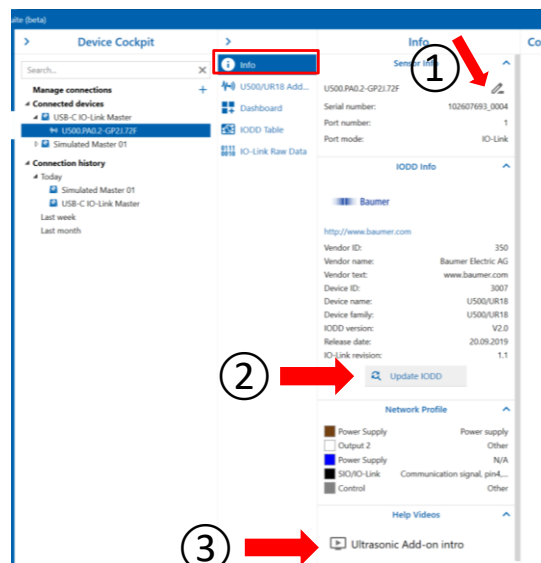


8.3 Info Tab

Under the tab "Info" you can view general information about the sensor and get a short overview about the IODD and the network profiles.

You can also:

- 1.) Personalize the sensor name by clicking on the pencil icon and then entering a name and confirming with "enter".
- 2.) Update the IODD of the sensor by clicking on the "Update IODD" button.
- 3.) Watch a help video specifically for the "Add-on" of the connected sensor.



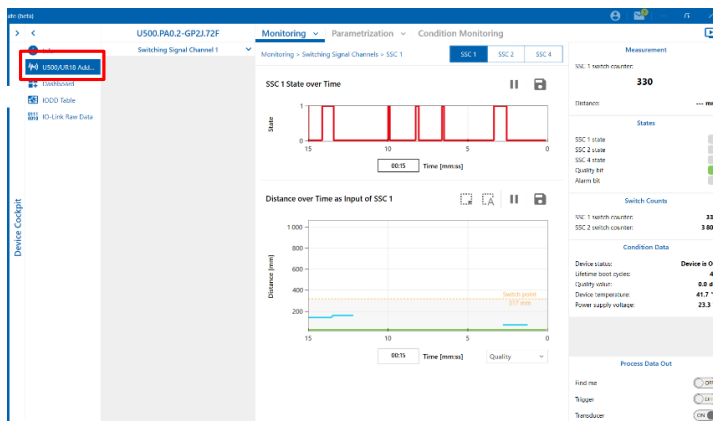
8.4 Add-on tab

The functions and options of the add-on differ depending on the sensor. In general, it offers the possibility to make various settings and evaluate measured values. As a rule, there are 2 submenus:

- Monitoring to read out the measured values.
- Parameterization to adjust the set parameters.

For some sensors, the "Condition Monitoring" submenu is also available to view additional diagnostic data.

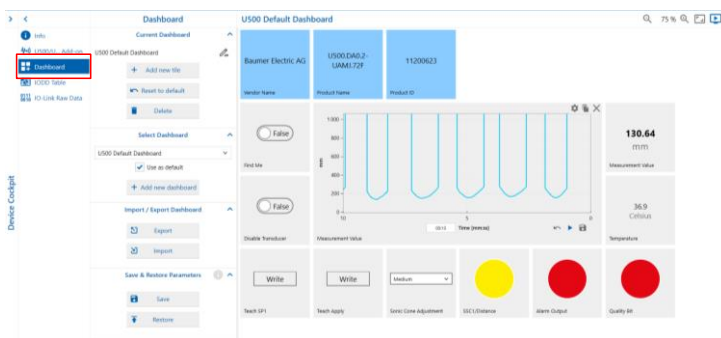
Further information at **Add-on**



8.5 Dashboard Tab

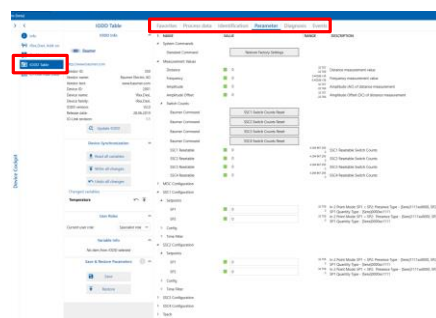
Under the tab "Dashboard" you have the possibility to display important information of the sensor, measured values, parameters and many other data in a clear, personalized way. You can design your dashboard individually and have the option to save the arrangement and reload it for later use.

Further information at **Dashboard**



8.6 IODD Table Tab

Under the Tab "IODD Table" the sensor functions are listed according to the IODD specifications of the connected device. Therefore this tab is very sensor specific and differs in the functions.

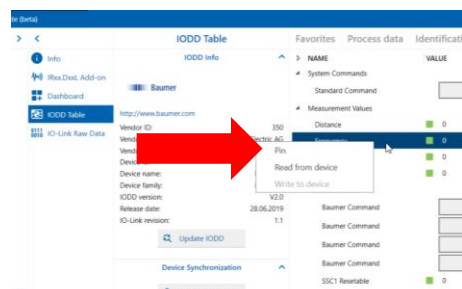


8.6.1 Pin as "Favorites"

You can also pin your most important data and parameters under the "Favorites" submenu.

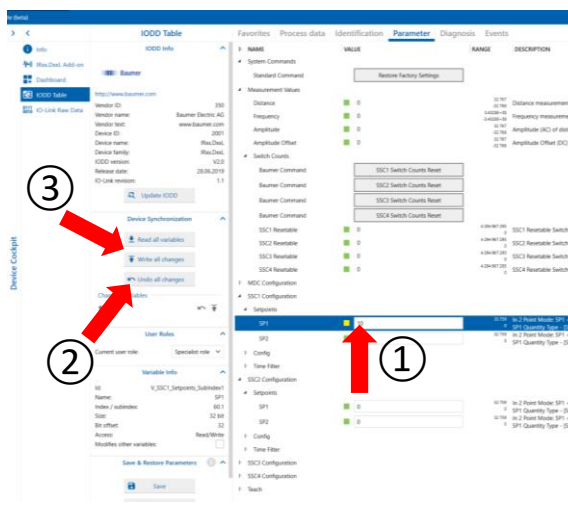
To do this:

Right-click on the desired parameter. A button "Pin" will open. Click on this button and the parameter will be added to favorites.



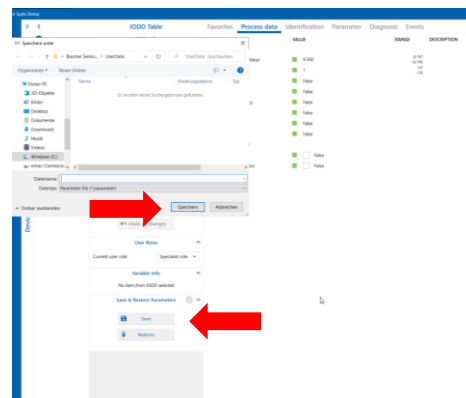
8.6.2 Change and reset parameters

- 1.) To change or reset a parameter, click in the corresponding column, enter the value and confirm with "Enter". Alternatively please click on the "Reset" button
- 2.) On the button "Undo all changes" you get the possibility to discard the changes.
- 3.) If you want to apply the change, you have to synchronize the sensor. Please click on the button "Write all changes". Now the change is confirmed.



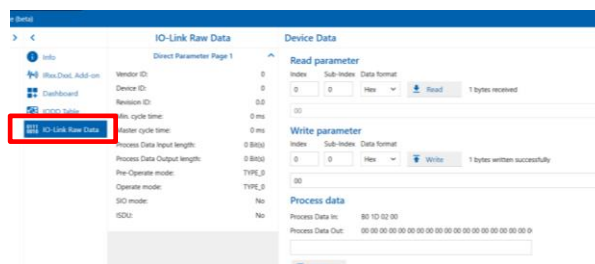
8.6.3 Save and Restore Parameters

- 1.) You can save the current setting of the parameters. Click on the button "Save" and choose a location on your device. Then click on the button "Save"
- 2.) Under the button "Restore" you can load a saved parameter setting from your files. Click on the button "Restore". Then a file directory opens. Select the file with the saved parameters and confirm with a click on "Open". Looks similar to 1.)



8.7 IO-Link Raw Data Tab

Under the tab "IO-Link Raw Data" you can get a small overview of the sensor information. You can also see the measured process data with the associated time, but in raw form. Furthermore you can read and write parameters.



9 Dashboard

9.1 Default Dashboard

The dashboard helps you to clearly display the most important information and data and to keep an exact overview of them. All Baumer sensors have a sensor-specific default dashboard. This means that all default dashboards of the different sensors are similar in appearance, but can differ in the different tiles.

1.) So you always have the product data in the top row and process and diagnostic data are displayed below. There is also a "Find Me" tile in each dashboard

2.) In the upper right corner of the dashboard you can change the size and with a click on the video icon you will be redirected to a help video

3.) You can also configure, duplicate and delete the existing tiles by placing your cursor on a tile and clicking the corresponding icon in the upper right corner of the tile. Alternatively, use the context menu by right clicking on a tile.



Furthermore you can add new tiles or drag and drop the arrangement to create your own personal dashboard.

9.2 Current Dashboard

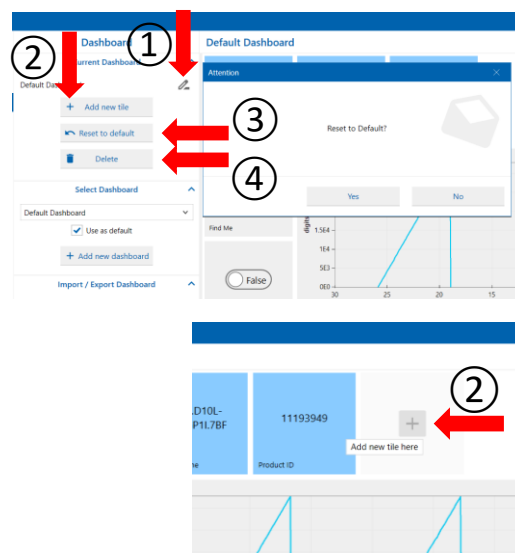
Under the column "Current Dashboard" you have the possibility to edit the name of the dashboard, add new tiles, reset the dashboard to default and delete the current dashboard.

1) To edit the name, click on the pencil icon. Then you can enter a name and save it by pressing the "Enter" key. To cancel the name change press the "Esc" key.

2.) To add a new tile, click on the button "Add new tile". Alternatively, you can scroll to a free tile in the dashboard and click on the "plus" icon. A window will open where you can configure the tile. (Further information at **Tile Configuration**)

3) To reset the dashboard to default, click on the button "Reset to default". Now a window opens, where you have to confirm the reset with "Yes"

4.) To delete the current dashboard, click on the button "Delete". Now a window opens where you have to confirm the deletion with "Yes".



9.3 "Select Dashboard" column

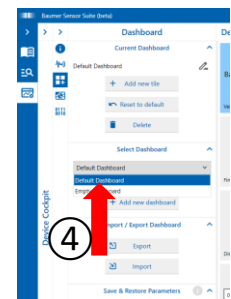
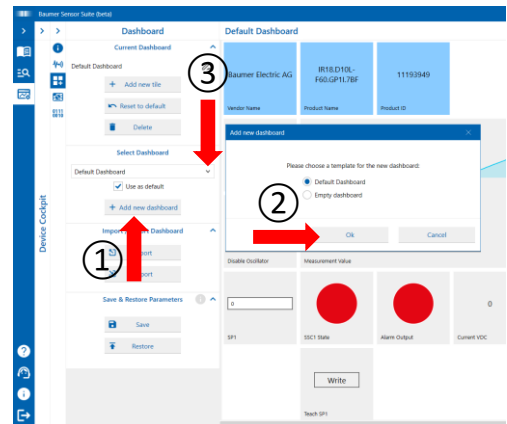
In the column "Select dashboard" you can create a new dashboard and switch the view between your dashboards.

To create a new dashboard:

- 1.) Click on the button "Add new dashboard".
- 2.) A window will open with a choice of which template you want to use. You have the choice to start with a completely empty dashboard or with the default dashboard. Make your choice and confirm with a click on "Ok".

To switch the view between the dashboards:

- 3.) Click on the down arrow.
- 4.) A selection of available dashboards opens. Click on it to open the desired dashboard.



9.4 Import / Export Dashboard

To be able to use your dashboard on other devices, there is the possibility to export or import the dashboard.

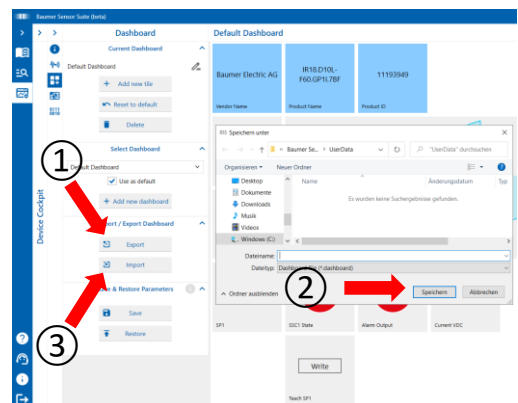
To export the dashboard:

- 1) Click on the "Export" button in the "Import / Export Dashboard" column.
- 2.) A window will open with your computer's file directory. Now select your desired location and click on the "Save" button.

To import a saved dashboard:

- 3.) Press the button "Import" and select a previously saved file of a dashboard in the following window. Confirm with the "Open" button.

Note: Only dashboards that were created for the same sensor type as the one connected can be imported.

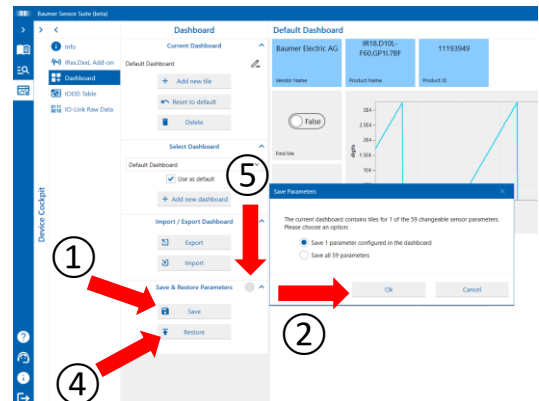


9.5 Save & Restore Parameters

You have the possibility to transfer your parameter setup from one sensor to the other.

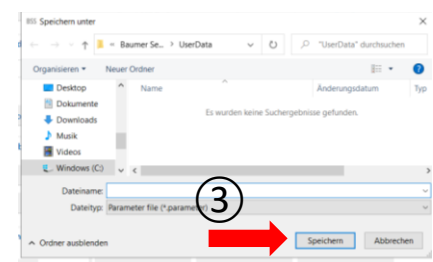
To save the parameters:

- 1.) Click on the button "Save"
- 2.) Then a window will open where you can choose if you want to save all parameters of this sensor or only the parameters configured in the dashboard. Make your choice and confirm with a click on "Ok"
- 3.) Now the file directory of your computer opens. Choose the desired location and click on "Save"



To restore the saved parameters:

- 4.) Click on the button "Restore" and in the next window select the file with the saved parameters. Confirm with "Open".
- 5.) For more information, click on the help button with the info icon.

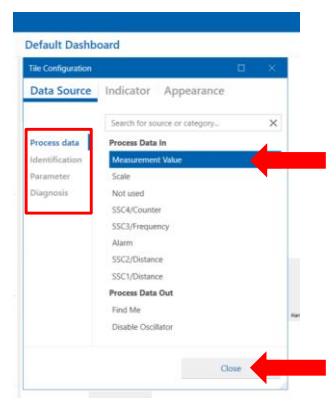


9.6 Tile Configuration

The tile configuration dialog will be displayed when adding a tile and can also be opened for existing tiles using the cog icon in the top right corner of each tile or using the context menu. You can close the dialog at any time using the "Close" button on the bottom of the dialog. Changes to the tile configuration settings are applied instantly, so you can see the results of your changes while you are configuring. The settings are grouped into the three tabs "Data Source", "Indicator" and "Appearance".

9.6.1 Data Source

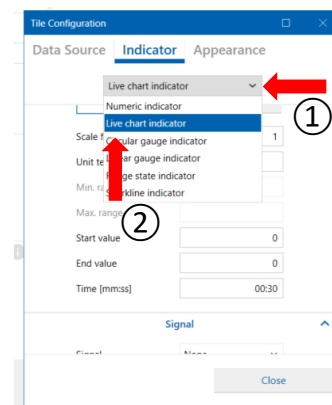
Under the item "Data Source" in the tile configuration you can select which sensor data should be displayed in the tile. You can choose between Process data, Identification, Parameters and Diagnosis (categories may differ slightly depending on the sensor). Click on the desired category. All available information under this category will be displayed in the list on the right hand side of the dialog. To quickly find a specific item you can use the filter function at the top.



9.6.2 Indicator

Under the item "Indicator" you can configure how the previously selected "Data Source" should be displayed. The set of available indicators and their settings depend on the type of the selected "Data Source"

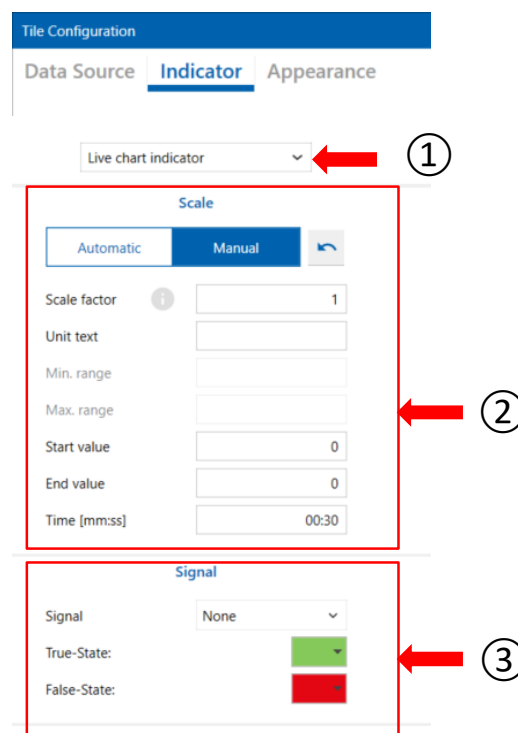
- 1.) To select an indicator, press the button with the arrow pointing down. Then a selection of all available indicators will open. To select one, click on the desired one.
- 2.) Then you have different settings for this indicator at your disposal. Which settings you can make varies from indicator to indicator.



Setting of a live chart indicator:

Because the "Live chart indicator" is one of the most important indicators, the configuration is explained with this example:

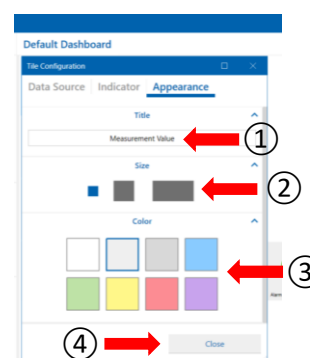
- 1.) Select the "Live chart indicator" in the drop down menu of the "Indicator" column.
2. In the sub-menu "Scale" you can adjust the scaling. There you have the choice between "Automatic" and "Manual". You can also adjust the "Scale factor" (for information about the scale factor, click on the icon with the info sign). In addition, you can enter a "Unit text" and adjust the y-axis range using the start/end-value or the min./max. range (in "Automatic" mode). Furthermore you can change the displayed time span.
- 3.) In the sub-menu "Signal" you can select an additional signal to be displayed in the live chart. You can find the list of available signals by clicking on the icon with the arrow pointing down. Also you can change the colors of the "True-State" and "False-State".



9.6.3 Appearance

Under the point "Appearance" you can:

- 1.) Edit the title of the tile. Click in the line "Title" and enter your desired text.
- 2.) Change the size of the tile. There are 3 available sizes, just click on the desired one.
- 3.) Change the color of the tile. Just click on the color you want.
- 4.) To close the tile configuration dialog, click on the "Close" button



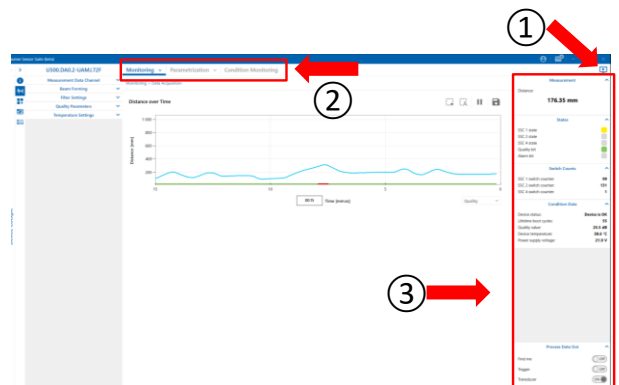
10 Add-ons

10.1 General

The add-ons offers you the possibility to quickly and clearly evaluate the measured values of a sensor, to set the parameters of a sensor and additionally offers you status data of the sensor.

1.) Each Add-on is sensor specific and differs in the functionality. You can get a detailed explanation of the corresponding Add-on in a help video, which opens with a click on the video icon in the upper right corner. (To watch the video you need an internet connection)

2.) Usually there are 3 columns. These are "Monitoring", where you can view and evaluate the data, but not set the parameters. "Parameterization", where you can change the parameters. There are sub-tabs for each of these columns, which you can view and select by clicking on the button with the arrow pointing downwards. The third column contains the "Condition Monitoring", where you can monitor the condition of the sensor with the help of continuously measured diagnostic data.



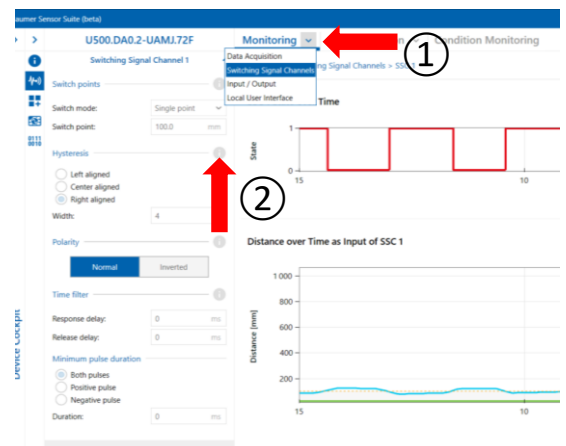
3.) The rightmost column looks similar for all add-ons and contains an overview of the most important data. These are the measured values, states, switch counts, as well as condition data and process data out.

10.2 Monitoring

In the "Monitoring" column you can view the measured data and the currently set parameters. However, you cannot change the parameters.

1) To switch between the sub-menus where different parameters are displayed, click on the button with the arrow pointing down. Then a drop-down menu will open. To select the desired sub-menu, just click on it.

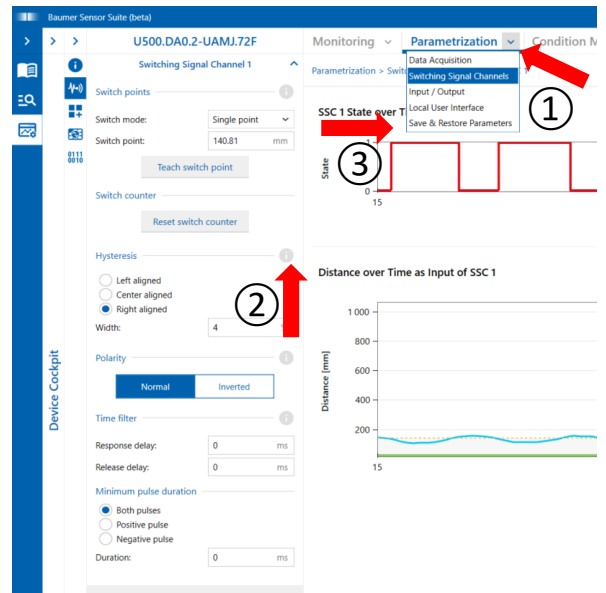
2.) The individual parameters in the sub-menus are explained in detail in the info tooltips. You can open the info tooltip by clicking on the "i" symbol.



10.3 Parametrization

Under the tab "Parameterization" you can set the parameters and, if applicable, see the change directly in the diagrams.

- 1.) Under the drop-down menu, which opens by clicking on the button with the arrow pointing downwards, you have the possibility to view the different sub-tabs and to switch between them.
- 2.) The parameters displayed in the different sub-tabs have info texts that contain a detailed explanation. To view the info texts, click on the symbol with the "i" next to the headline
- 3.) Under the sub-tab "Safe and Restore Parameters" you can save or load the set configuration of the parameters.



10.4 Change Parameters

You have two different possibilities to change the parameters:

- 1.) You can enter the desired value of the parameter directly in the input field of the parameter and confirm with "Enter".
- 2.) Alternatively, you can drag the slider in the diagram to the desired value to set the parameter.



10.5 Condition Monitoring

The "Condition Monitoring" tab provides additional data on the operation of the sensors. The Histogram contains the number of occurrences over time and can be displayed in different ways ("Logarithmic", "Linear" and "Normalized"), reset or exported.



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