



THORSTEN REIBEL & JUERGEN SCHILDER

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar – Building Academy Smart Buildings

Agenda

- Overview Switching
- ETS application & firmware versions and update of a Switch Actuator
- Overview ABB i-bus® Tool
- ABB i-bus® Tool and Switch Actuators SA(H)/S
- Practical demonstration

**ABB i-bus® Tool
supports all KNX
Switch Actuators
SA(H)/S**

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

Overview Switching

Combi Switch Actuators (Market launch Q4/2019)

- The 9 combi devices are combining two applications: switching and shading. The products are ideally made for residential usage to offer greatest flexibility. With innovative Keypad for manual operation

Standard Switch Actuators (Market launch Q1/2020)

- These 12 devices are building the standard when it comes to switching applications for commercial buildings. During the development we focused on providing a cost optimized selection of products, that matches the needs of commercial projects

Professional Switch Actuators (Market Launch Q1/2020 and Q4/2020 for Switch Actuators with Energy Functions)

- The professional series includes 8 Switch Actuators made for high switching capacity. This portfolio has been developed to suit the high requirements of industry standards. Optional feature: Energy Functions

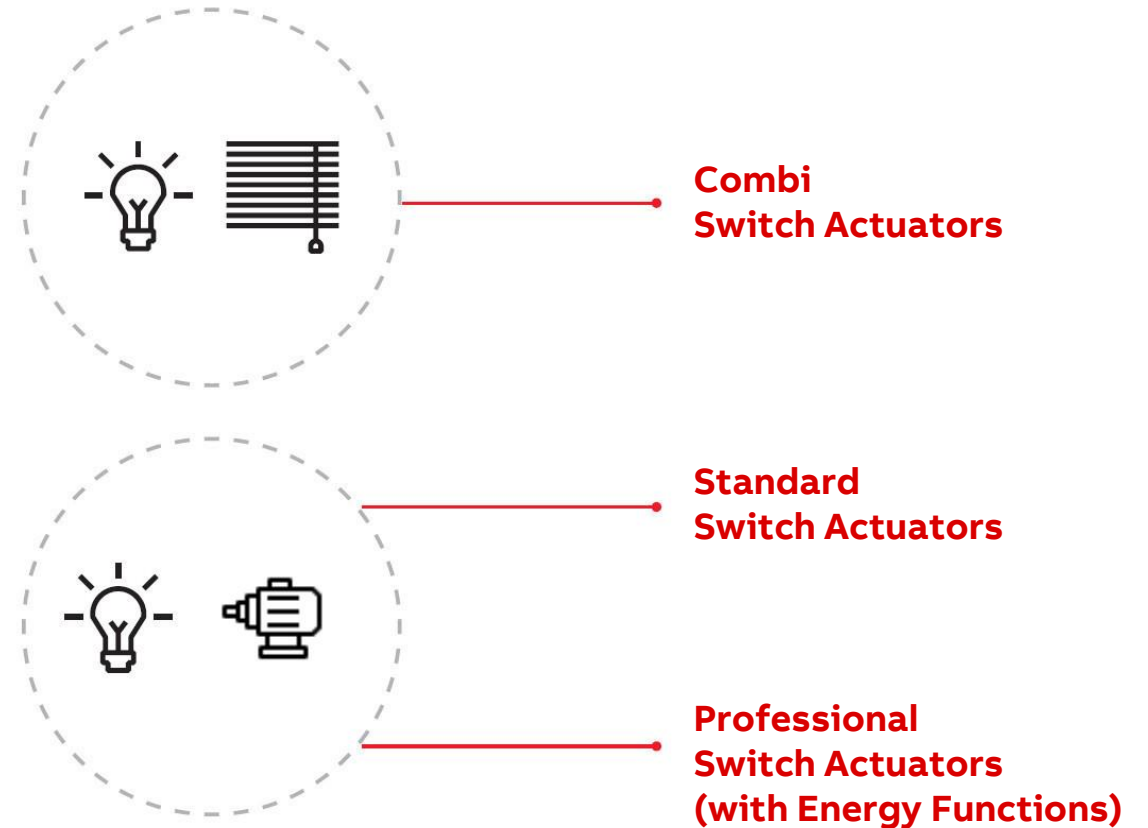
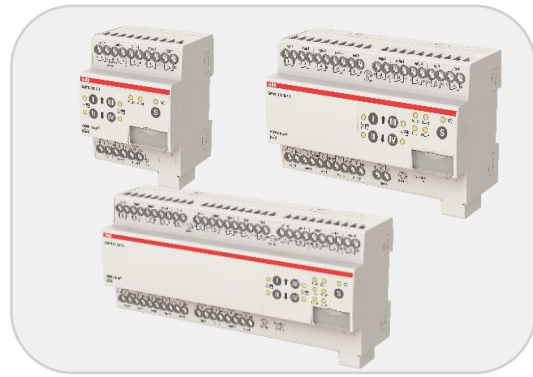


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Combi Switch Actuators



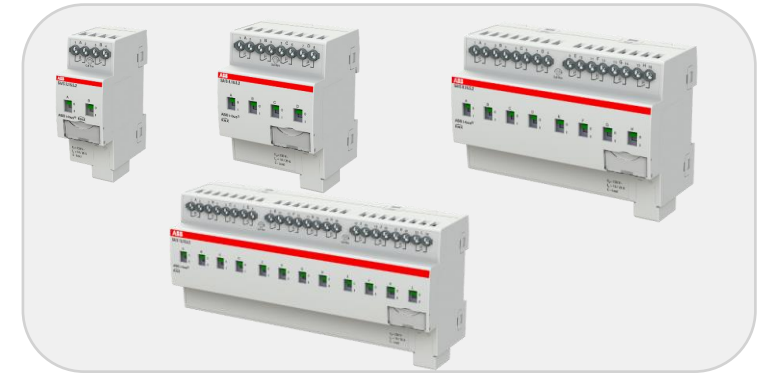
- 8 (4MW), 16 (8MW) & 24 (12 MW) channels
- 6A, 10A & 16A - AC1 ratings
- 3 x 3 devices

Standard Switch Actuators



- 2, 4, 8 & 12 channels
- 6A, 10A & 16A - AC1 ratings
- 3 x 4 devices

Professional Switch Actuators



- 2, 4, 8 & 12 channels
- 16/20A C-load + energy functions
- 2 x 4 devices

Residential



Applications



Commercial

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

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Overview ETS Application Version 1.0 with Market Launch

ETS Application with comprehensive functions

- Templates for switch- and shutter functions
- Freely programmable logic independent of the output channels (AND, OR, Exclusive OR, GATE) and threshold functions
- Combi Switch Actuators SAH/S: Full functionality of shutter outputs with two channels together (Safety/Weather alarm, automatic sun protection, scenes, blocking, forced operation)
- Switch outputs with time functions (Staircase, Delay, Flashing), safety priority, forced operation, blocking, 16 scenes (1 byte)
- Central objects (switching, shutter functions, scenes)
- Colored hints simplify work
- SA/S with energy functions: Energy consumption, energy groups, load monitoring, load shedding, contact supervision
- ... and more

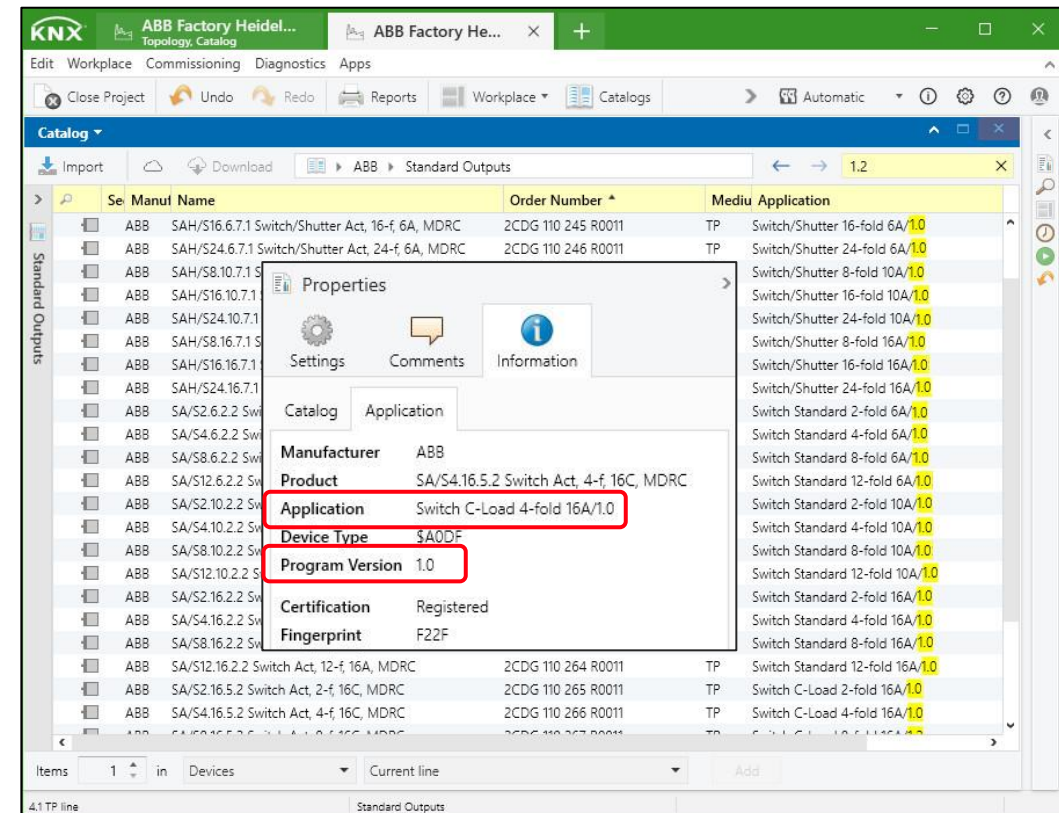


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Overview of Changes with ETS Application Version 1.1

ETS Application with more functions

- Load Shedding
- Optimized parameter settings for
 - Logic/Threshold
 - Scenes
 - Safety Priority
- Output names
- Wording
- Bug fixing
- ... and more

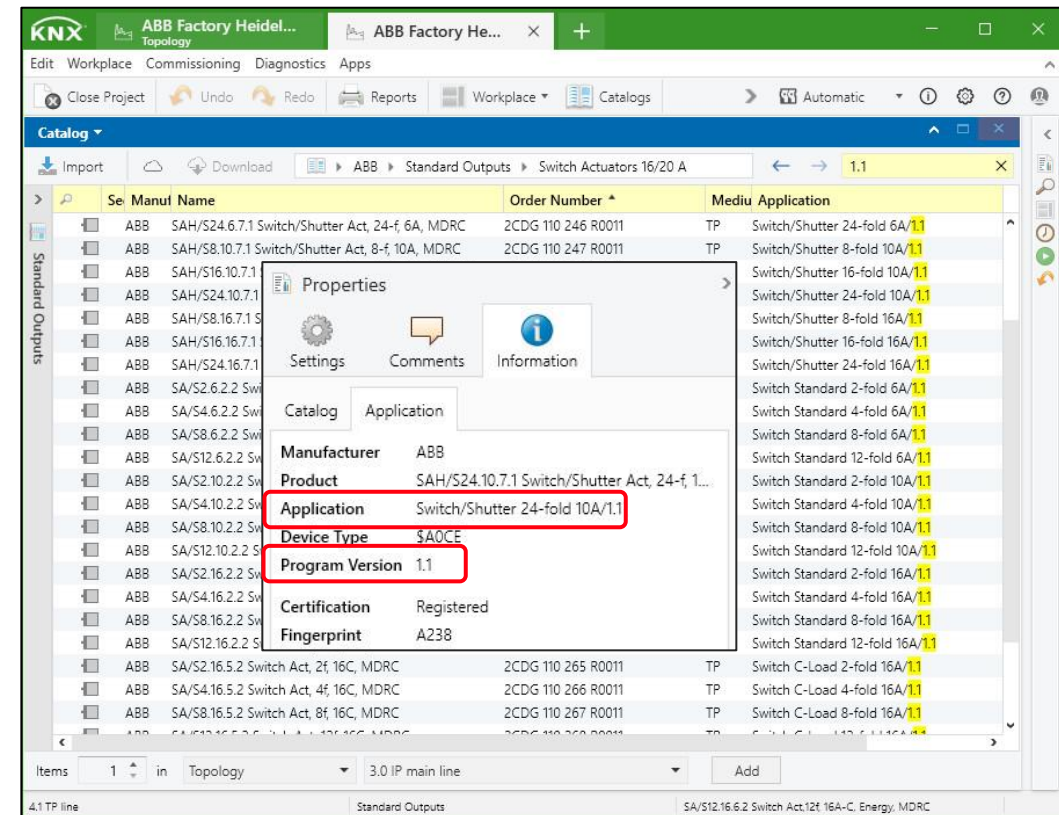


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

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New ETS Appl. V1.2 and firmware 0.2.0

Integration of ABB i-bus® Tool function:

A powerful portfolio combined with a powerful tool

- ABB i-bus® Tool version V1.9.49.0 or higher is required
- This enables a quick and easy diagnosis, error analysis and display of operating status
 - The operating states of all outputs can be seen at a glance
 - Function changes that can be carried out via communication objects are displayed
 - The Simulation of functions, such as central commands, priority control, safety, load shedding control, scenes... are possible
 - The behavior of each output can be tested individually
 - Display of current and power values, various energy meters, as well as an overview of load monitoring (only with the Switch Actuator SA/S x.16.6.2 with Energy Function)
 - ... and more

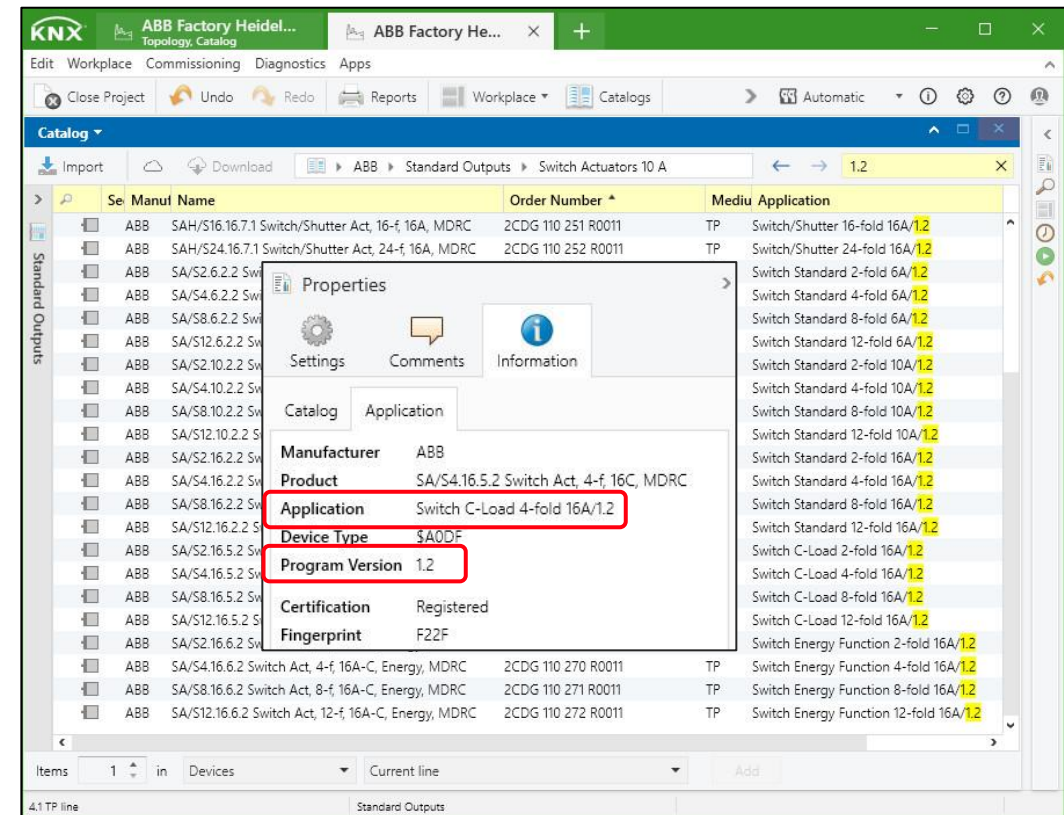


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

New ETS Appl. V1.2 and firmware 0.2.0

Integration of ABB i-bus® Tool function – A powerful portfolio combined with a powerful tool



Device handling

Quick and easy overview of device status, activated device functions and parameter settings



Troubleshooting

Easy to validate why a channel is not switching as expected (forced operation, load shedding, blocked by a safety alarm)



Commissioning & Maintenance

Observation of real device behavior, e.g., forced operation, staircase function, load shedding stages and logic signals



Energy monitoring

Display of the currently measured current, power and total energy consumption and supervise the load status

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

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Firmware and ETS Application releases: Combi Switch Actuators SAH/S x.x.7.1

Date	10/2019	12/2019	03/2020	09/2020	11/2020	12/2021	02/2022	11/2022
Firmware	0.1.0	0.1.2	0.1.3	0.1.5	0.1.6	0.1.7	0.1.8	0.2.0
ETS Application	1.0					1.1		1.2

NOTE:

- We recommend ensuring that devices are always installed and operating using the latest firmware and software versions
- When updating to the new functionality, the sequence of application and firmware must be observed
- For firmware update please use the ETS App "ABB Firmware-Update 2.0"
- An existing ETS application (e.g. 1.1) can be converted to a higher version with the ETS App "Copy Convert" (incl. parameters and linked group addresses)
- For more information see [Release Note Combi Switch Actuator](#)

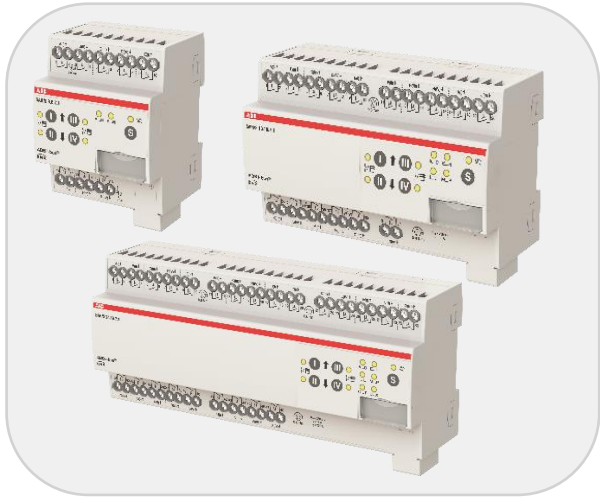


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

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Firmware and ETS Application releases: Standard Switch Actuators SA/S x.x.2.2

Date	01/2020	03/2020	09/2020	11/2020	12/2021	02/2022	11/2022
Firmware	0.1.0	0.1.1	0.1.2	0.1.3	0.1.4	0.1.5	0.2.0
ETS Application	1.0				1.1		1.2

NOTE:

- We recommend ensuring that devices are always installed and operating using the latest firmware and software versions
- When updating to the new functionality, the sequence of application and firmware must be observed
- For firmware update please use the ETS App "ABB Firmware-Update 2.0"
- An existing ETS application (e.g. 1.1) can be converted to a higher version with the ETS App "Copy Convert" (incl. parameters and linked group addresses)
- For more information see [Release Note Standard Switch Actuator](#)



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Firmware and ETS Application releases: Professional Switch Actuators SA/S x.16.5.2

Date	01/2020	03/2020	09/2020	11/2020	12/2021	02/2022	11/2022
Firmware	0.1.0	0.1.1	0.1.2	0.1.3	0.1.4	0.1.5	0.2.0
ETS Application	1.0				1.1		1.2

NOTE:

- We recommend ensuring that devices are always installed and operating using the latest firmware and software versions
- When updating to the new functionality, the sequence of application and firmware must be observed
- For firmware update please use the ETS App "ABB Firmware-Update 2.0"
- An existing ETS application (e.g. 1.1) can be converted to a higher version with the ETS App "Copy Convert" (incl. parameters and linked group addresses)
- For more information see [Release Note Professional Switch Actuator](#)



ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

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Firmware and ETS Application releases: Professional Switch Actuators with Energy Function SA/S x.16.6.2

Date	11/2020	12/2021	02/2022	11/2022
Firmware	0.1.1	0.1.2	0.1.3	0.2.0
ETS Application	1.0	1.1		1.2

NOTE:

- We recommend ensuring that devices are always installed and operating using the latest firmware and software versions
- When updating to the new functionality, the sequence of application and firmware must be observed
- For firmware update please use the ETS App "ABB Firmware-Update 2.0"
- An existing ETS application (e.g. 1.1) can be converted to a higher version with the ETS App "Copy Convert" (incl. parameters and linked group addresses)
- For more information see [Release Note Professional Switch Actuator with Energy Function](#)



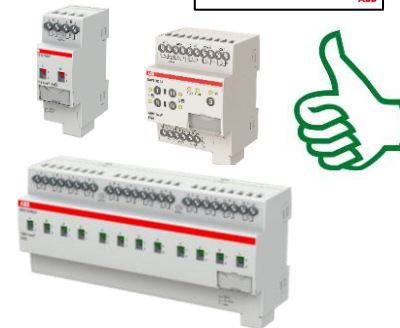
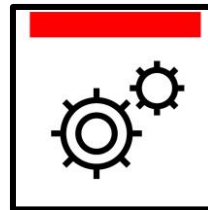
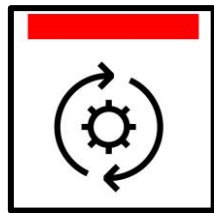
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Update of firmware 0.2.0 and ETS application V1.2

When updating to the new functionality, the sequence of application and firmware must be observed

- First, the affected devices must be updated to firmware version 0.2.0 with the ETS App “Firmware Update 2.0”
- Afterwards an existing ETS application can be updated to a higher version V1.2 with the ETS App “Copy Convert” incl. parameters and linked group addresses!
- Finally, the higher ETS application must be loaded into the device (full download)



Switch Actuator SA(H)/S

- Firmware version 0.1.0/0.1.1/...
- ETS application 1.0/1.1

ETS App “Firmware Update 2.0”

- Update the firmware to version 0.2.0

ETS App “Update Copy Convert”

- Update the ETS application to V1.2 while retaining current configuration

ETS5 or ETS6

- Download the updated ETS application V1.2 (full download)

Switch Actuator SA(H)/S

- Firmware version 0.2.0
- ETS application 1.2

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ETS and ETS Apps

- ETS
Software tool to design, configure and diagnose intelligent home and building automation installations based on KNX
- ETS App
Extension to the standard functional scope of ETS, not limited to a specific device
It is normally not included in the standard ETS software
- KNX members can offer ETS Apps, tailored to the needs and features of their products (e.g. firmware update, DCA SmartTouch, configuration Application Controller AC/S, ...)
- Log in to your “myKNX account” and download ETS Apps
“Update Copy Convert”, “Firmware Update 2.0”, ... are free of charge
- Install the ETS Apps in the ETS

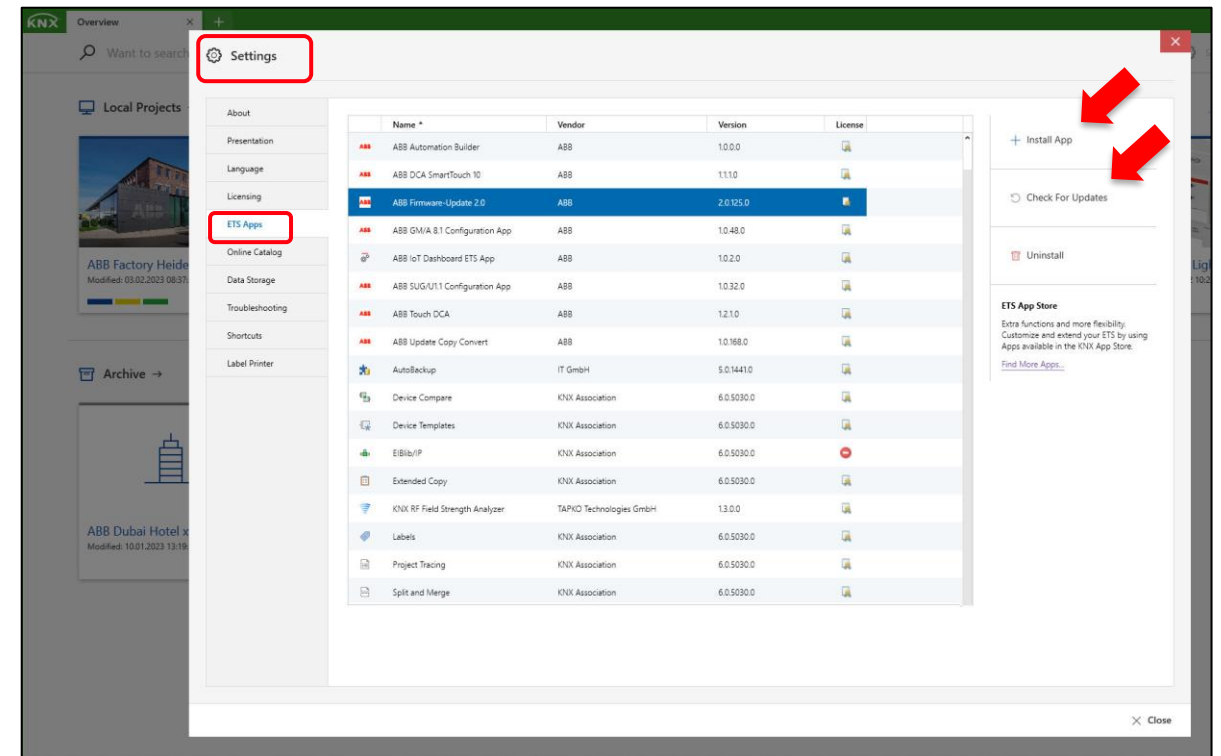


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ETS App "Firmware Update 2.0"

- The ETS App "ABB Firmware Update 2.0" is used to update the firmware of various ABB KNX devices directly via the KNX bus
- The app can be started directly from ETS
 - The latest firmware files can be downloaded automatically from the Internet
 - The app automatically checks the devices in the open project or affected devices
 - The firmware version can be read directly from the devices
 - When the scan process is finished, the firmware can be updated from previously selected devices
 - It is recommended that the update of the firmware does not run across the Line Couplers or IP Router, since the telegram load can be too high or the update can take longer
 - Click the "Update Firmware" button to start the update ...

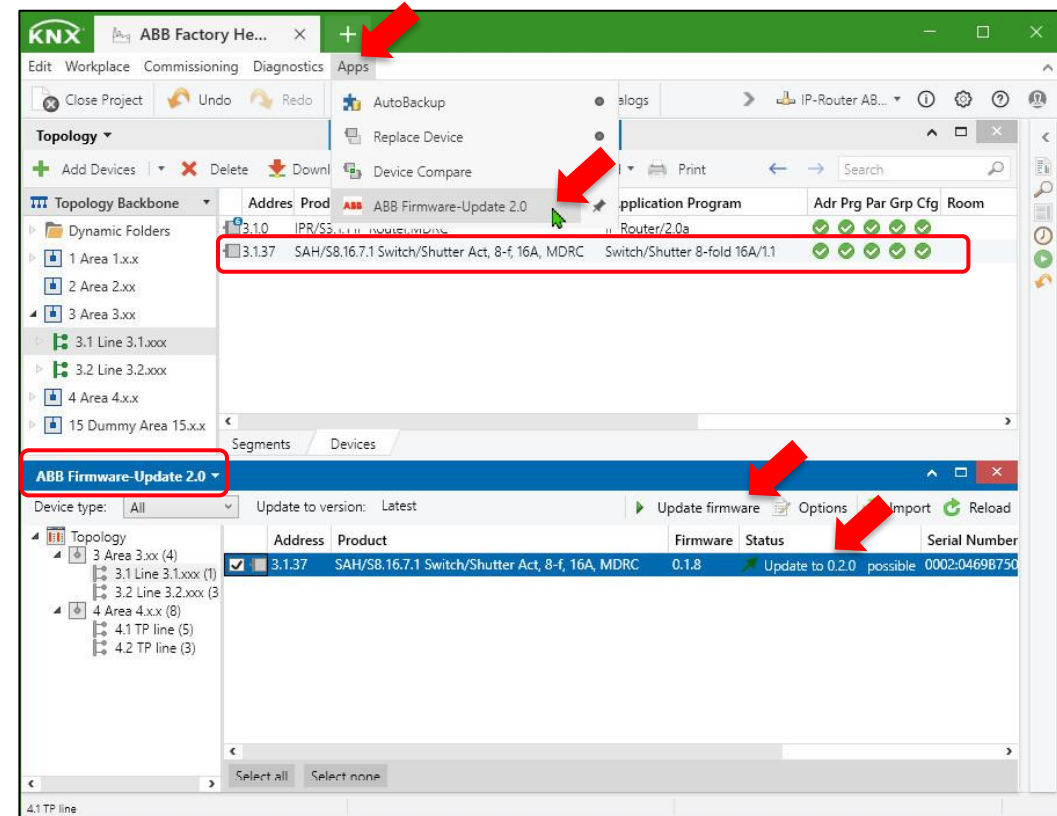


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ETS App “Firmware Update 2.0”

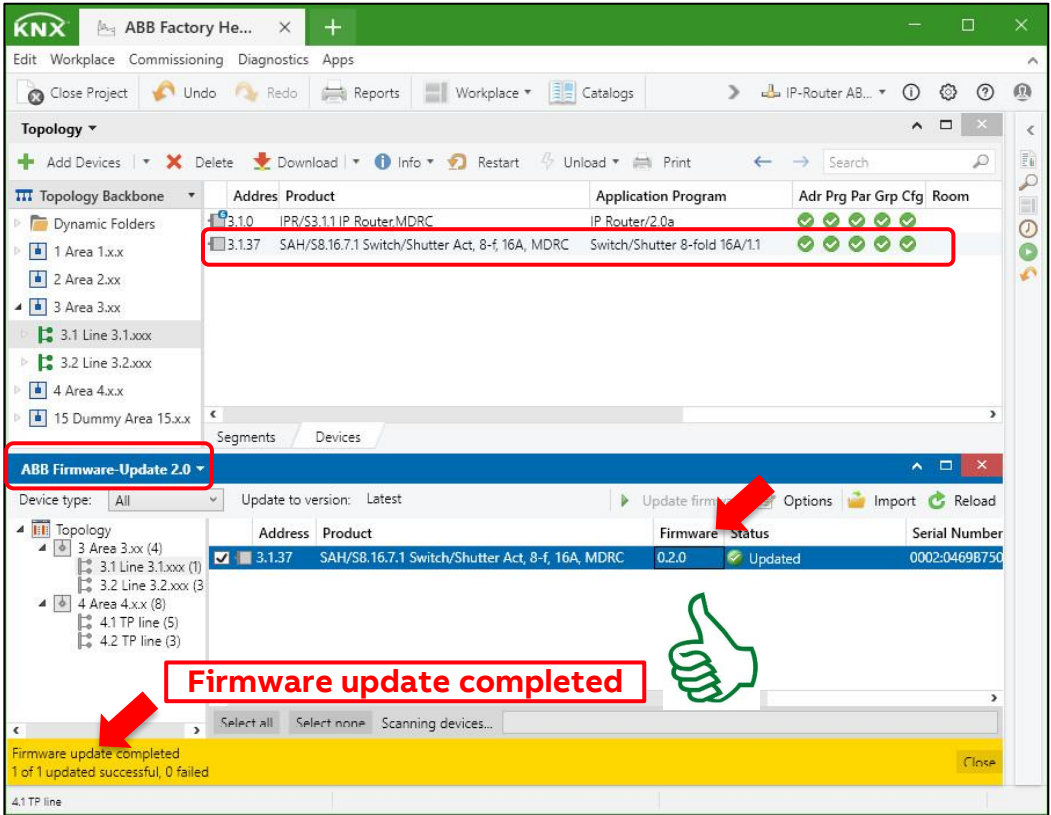
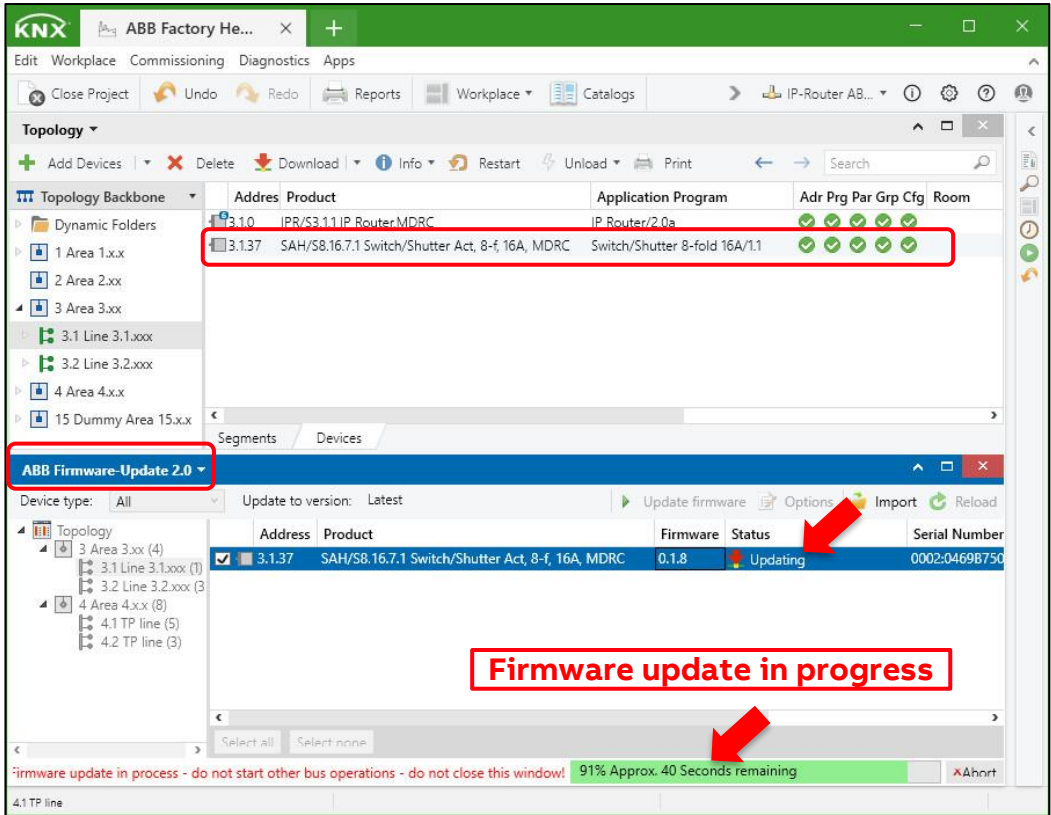


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ETS App “Update Copy Convert”

- The ETS App “Update Copy Convert” provides a series of useful functions for the ETS application and device configuration (parameters and group addresses) in an ETS project
- The functions are:
 - Update: Changes the application program to a later or earlier version while retaining current configurations
 - Convert: Transfers/adopts a configuration from an identical or compatible source device
 - Channel Copy: Copies a channel configuration to other channels on a multichannel device
 - Channel Exchange: Exchanges configurations between two channels on a multichannel device
 - Import/Export: Saves and reads device configurations as external files
- Click the “Update” button to start the update ...

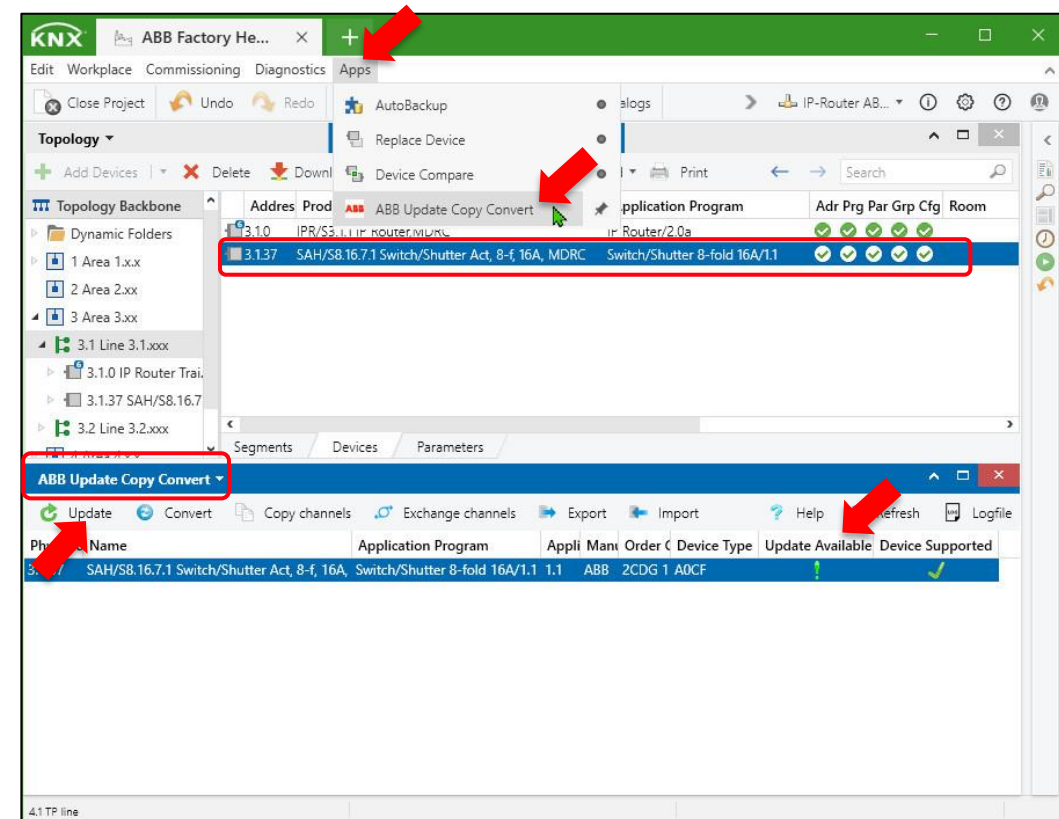


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ETS App “Update Copy Convert”

Update Devices

☐ Update all devices with this application version

Devices to be updated:

Phys. Address	Name	Application Program	Application Version	Manufacturer	Order Code	Device Type
3.1.37	SAH/S8.16.7.1 Switch/Shutt	Switch/Shutter 8-fold 16A/1.2	1.1	ABB	2CDG 110 250 R0011	A0CF

There are 1 available application versions.
Select the application you want to update to:

SAH/S8.16.7.1 Switch/Shutter Act, 8-f, 16A, MDRC V1.2

The devices listed above are going to be updated to this application version: SAH/S8.16.7.1 Switch/Shutter Act, 8-f, 16A, MDRC V1.2

Start Update

Update device 1 of 1 in progress.
3.1.37 SAH/S8.16.7.1 Switch/Shutter Act, 8-f, 16A, MDRC

KNX ABB Factory He...

Top menu: Edit, Workplace, Commissioning, Diagnostics, Apps

Toolbar: Close Project, Undo, Redo, Reports, Workplace, Catalogs, IP-Router AB...

Topology

Topology Backbone

Address	Product	Application Program	Prg	Par	Grp	Cfg	Room
3.1.0	IPR/S3.1.1 IP Router MDRC	IP Router/2.0a	✓	✓	✓	✓	
3.1.37	SAH/S8.16.7.1 Switch/Shutter Act, 8-f, 16A, MDRC	Switch/Shutter 8-fold 16A/1.2	✓	✓	✓	✓	

ABB Update Copy Convert

Update, Convert, Copy channels, Exchange channels, Import, Help, Refresh, Logfile

Phys. Ad	Name	Application Program	Appli	Mani	Order	Device Type	Update Available	Device Supported
3.1.37	SAH/S8.16.7.1 Switch/Shutter Act, 8-f, 16A, MDRC	Switch/Shutter 8-fold 16A/1.2	1.2	ABB	2CDG 1	A0CF		✓

Completed.

4.1 TP line | 3.1 Line 3.1.xxx | 3.1.37 SAH/S8.16.7.1 Switch/Shutter Act, 8-f, 16A, MDRC

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ETS – download

- With the ETS App “Copy Convert”, the existing ETS application was updated to a higher version
- The individual address, the complete parameterization and the linked group addresses were also taken over
- Then only the updated ETS application has to be loaded into the device, the individual address is already available (it can happen that the ETS deletes all five device flags)
- Since it is a higher ETS application, the ETS makes a complete download

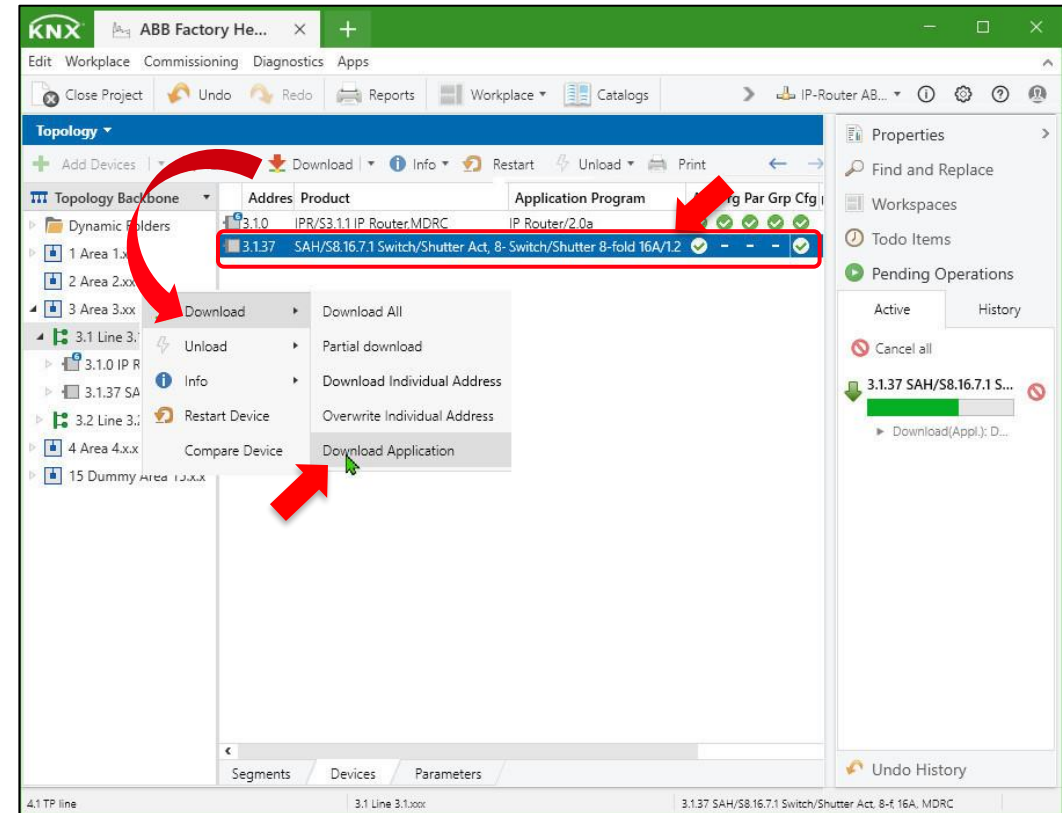


ABB i-bus® Tool

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

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ABB i-bus® Tool

- It supports system integrators during commissioning and service
- Internal information and states of the device hardware and software applications are now available in a transparent manner
- The ABB i-bus® Tool is optional, i.e. the ABB i-bus® KNX devices must still be commissioned using just the ETS
- An important principle is that no divergences to the ETS project can result through the ABB i-bus® Tool

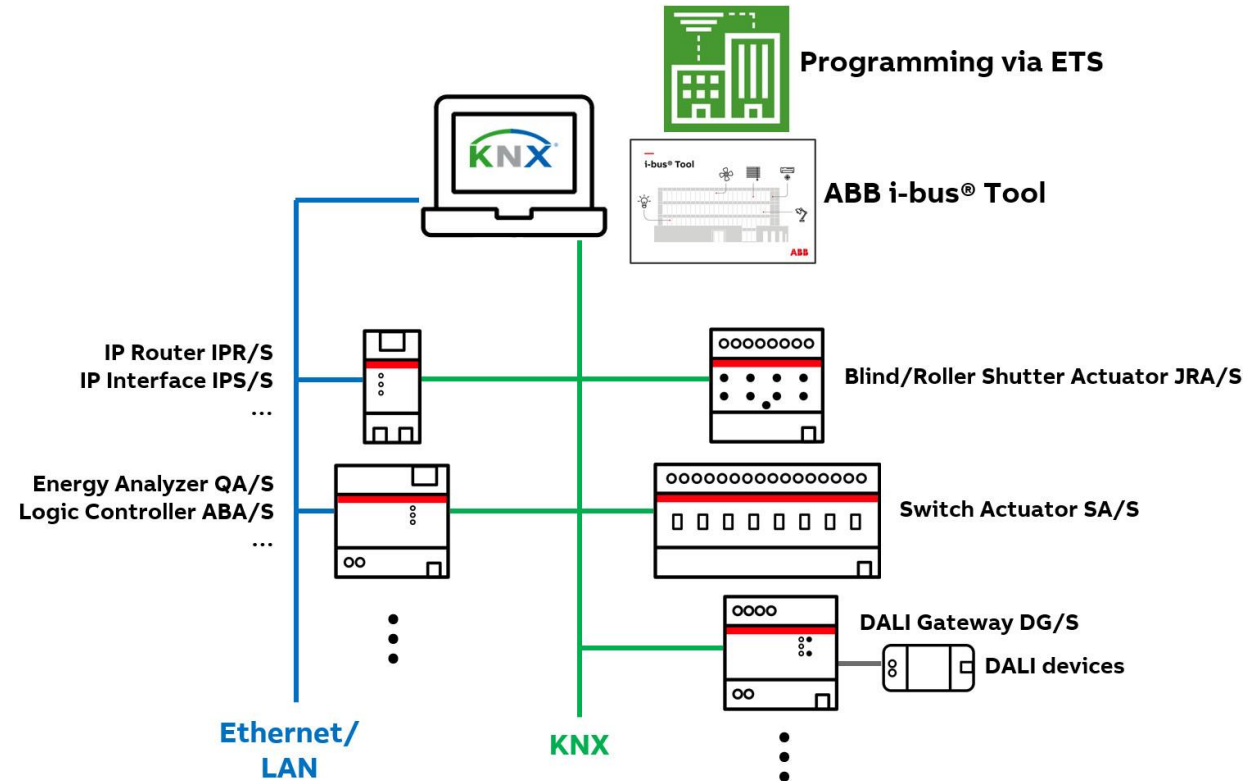


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ABB i-bus® Tool – Overview

- The ABB i-bus® Tool accesses an ABB i-bus® KNX device via a standard KNX interface (USB, IP) with the assistance of the individual address
- When the ABB i-bus® Tool is connected to a KNX device, the device-specific plug-in displays the functions that are possible for this device type
- The system integrator can trigger the desired functions, read values, simulate states, make settings for the connected device (e.g. scenes)
- Functions are only available if they have been enabled in the ETS
- Disabled functions are greyed out or not visible
- Help function

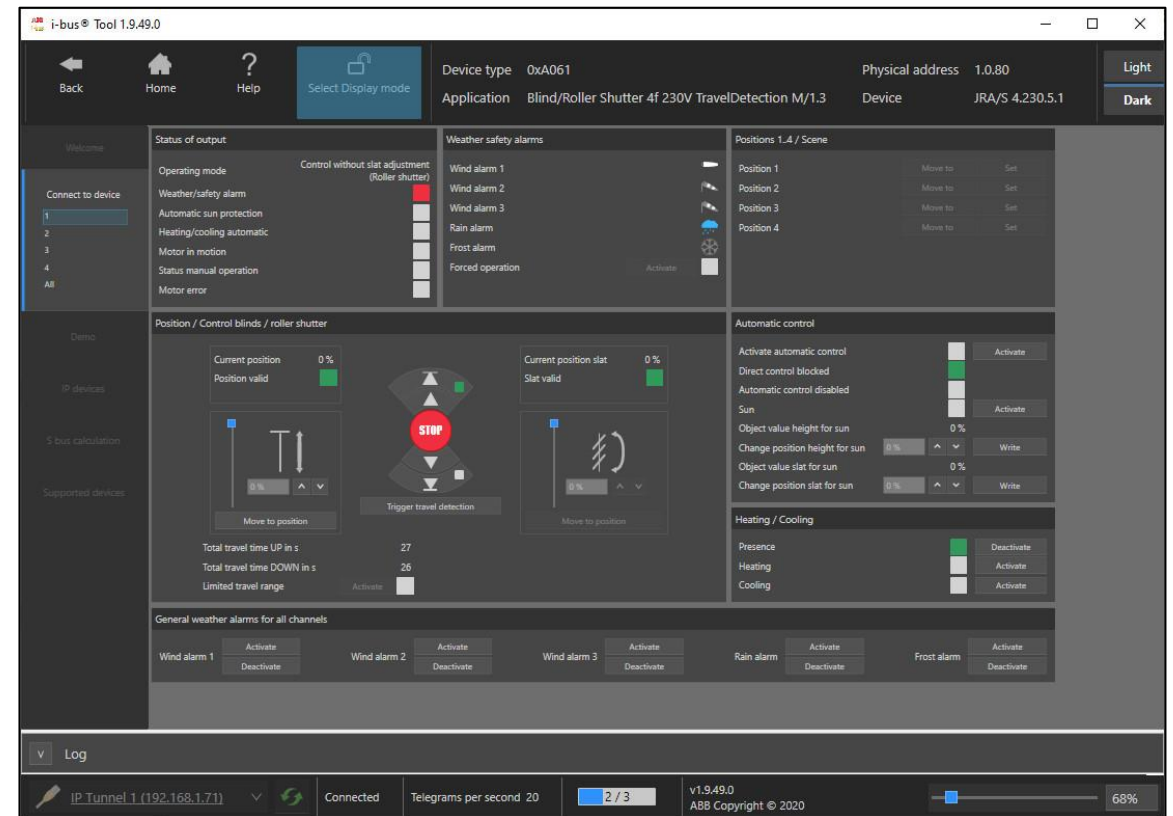


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ABB i-bus® Tool – Check ETS parameter settings

- KNX devices provide numerous options of parameter settings
- After parametrization and downloading, the behavior of the devices have to be checked and tested
→ Send group telegrams with the group monitor (cumbersome)
- Use the ABB i-bus® Tool !!!
- For example Combi Switch Actuator SAH/S
 - Wind alarm: UP
 - Rain alarm: DOWN
 - Frost alarm: height 20% and slat 20%
 - Forced operation: Deactivated
 - Scene assignment: 11
 - ...
 - Order of priority ???
→ Wind, rain, frost and forced operation at the same time

3.1.37 SAH/S8.16.7.1 Switch/Shutter Act, 8-f, 16A, MDRC > Shutter Actuator C+D: > Safety/Weather alarms

Configuration	Safety/Weather alarms
+ Device settings	Parameter setting <input type="radio"/> Apply from template <input checked="" type="radio"/> Individual
+ Manual operation	Output reacts to wind alarm 1 <input checked="" type="checkbox"/>
– Safety/Weather alarms	Output reacts to wind alarm 2 <input checked="" type="checkbox"/>
Safety/Weather alarms	Output reacts to wind alarm 3 <input checked="" type="checkbox"/>
+ Switch Actuator template	Blind/Shutter reaction on wind alarm Up
+ Shutter Actuator template	Blind/Shutter reaction on rain alarm Down
+ Switch Actuator A:	Blind/Shutter reaction on frost alarm Individual position
+ Switch Actuator B:	Position height (0 % = top; 100 % = bottom) 20 %
– Shutter Actuator C+D:	Position slat (0 % = open; 100 % = closed) 20 %
Shutter Actuator functions	Forced operation (1 bit/2 bit) Deactivated
Basic settings	Blind/Shutter reaction on block Scene assignment
Drive	Scene assignment 11
Blind/Shutter	Blind/Shutter reaction on cancellation of weather alarm, block and forced operation Refreshed KNX state
Status Messages	Order of priority of weather alarm, block and forced operation 1.Weather alarm - 2.Block - 3.Forced operation
+ Shutter Actuator E+F:	

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

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ABB i-bus® Tool – Supported devices

- Analogue Actuators AA/x and Analogue Inputs AE/S
 - DALI Gateways DG/S, DGN/S, DLR/x
 - Energy Module EM/S and Energy Actuator SE/S
 - Fan Coil Actuators FCA/S and Fan Coil Controllers FCC/S
 - Valve Drive Controller VC/S
 - Heating/Cooling Circuit Controller HCC/S
 - Blind/Roller Shutter Actuator JRA/S
 - Line Coupler LK/S
 - Split Unit Gateway SUG/U
 - Power Supplies SV/S
 - Universal Dim Actuator UD/S
 - Weather Station WS/S and Weather Unit WZ/S
 - **NEW: Combi Actuators SAH/S and Switch Actuators SA/S**
- ... and new devices are added continuously

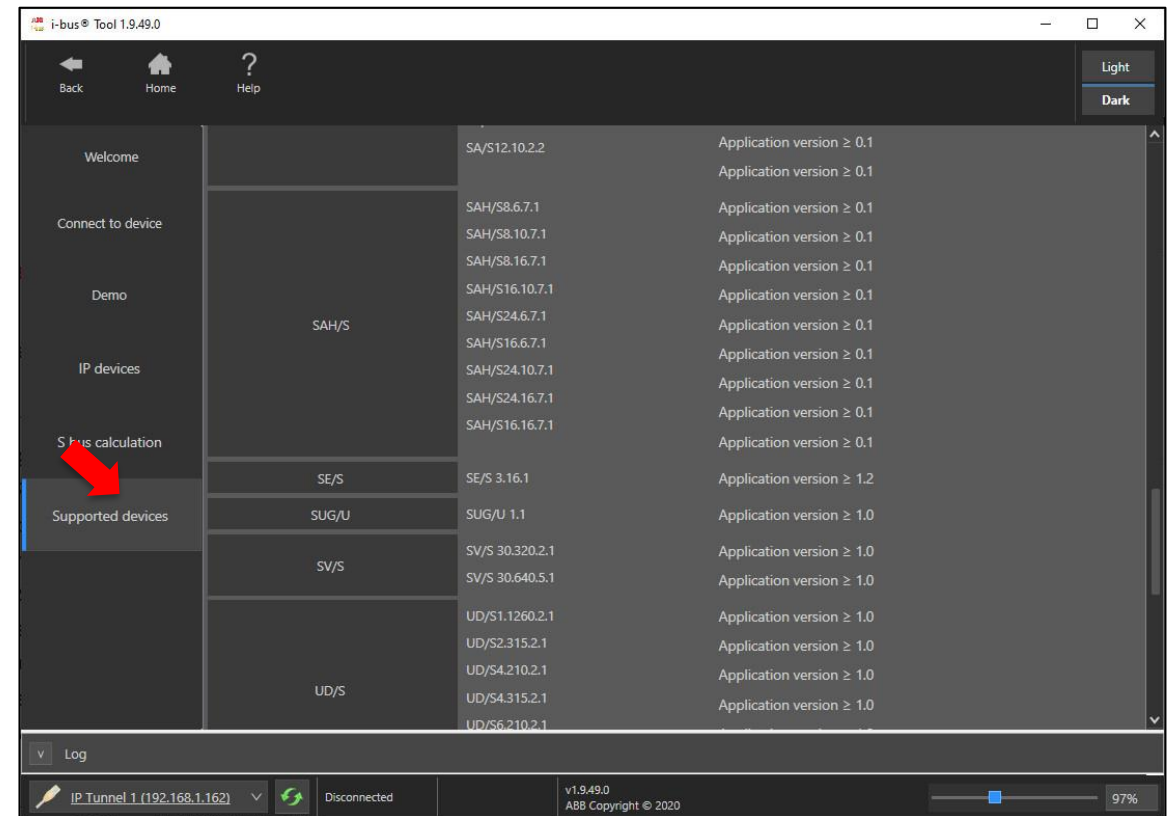


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ABB i-bus® Tool – DALI-Software-Tool inside

The DALI Tool is mandatory for setting up the DALI devices

- Addressing DALI devices, e.g. ballasts, drivers, EML converters
- Assignment of the DALI devices into DALI groups
- Display of all lamp and ballast faults
- Commissioning of constant light control (DALI Light Controller)
- ...

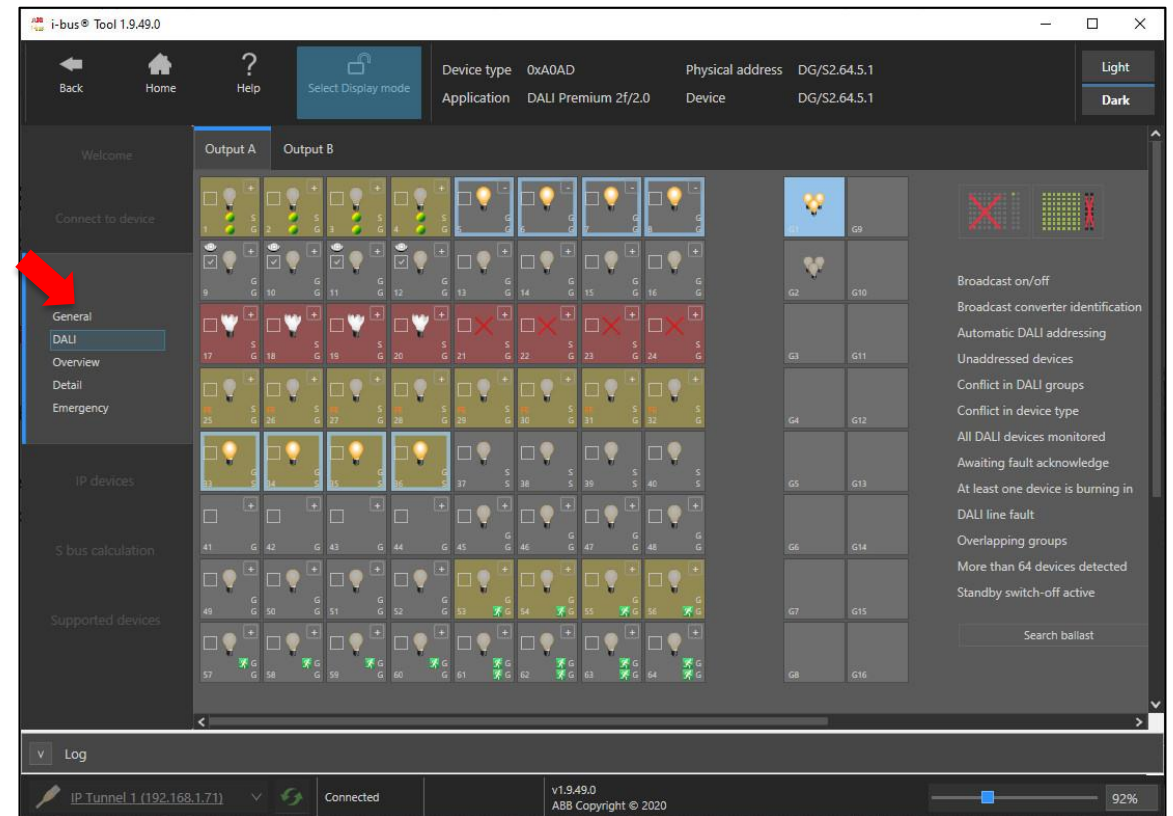


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ABB i-bus® Tool – Demo mode

- The demo mode is intended to demonstrate the possible functions without a connection to the KNX bus
- All the available devices are displayed
- The desired device must be selected and the user interface is opened via “Demo mode”
- The display is intended solely for demonstration purposes
- No functions are available and there is no connection to the bus

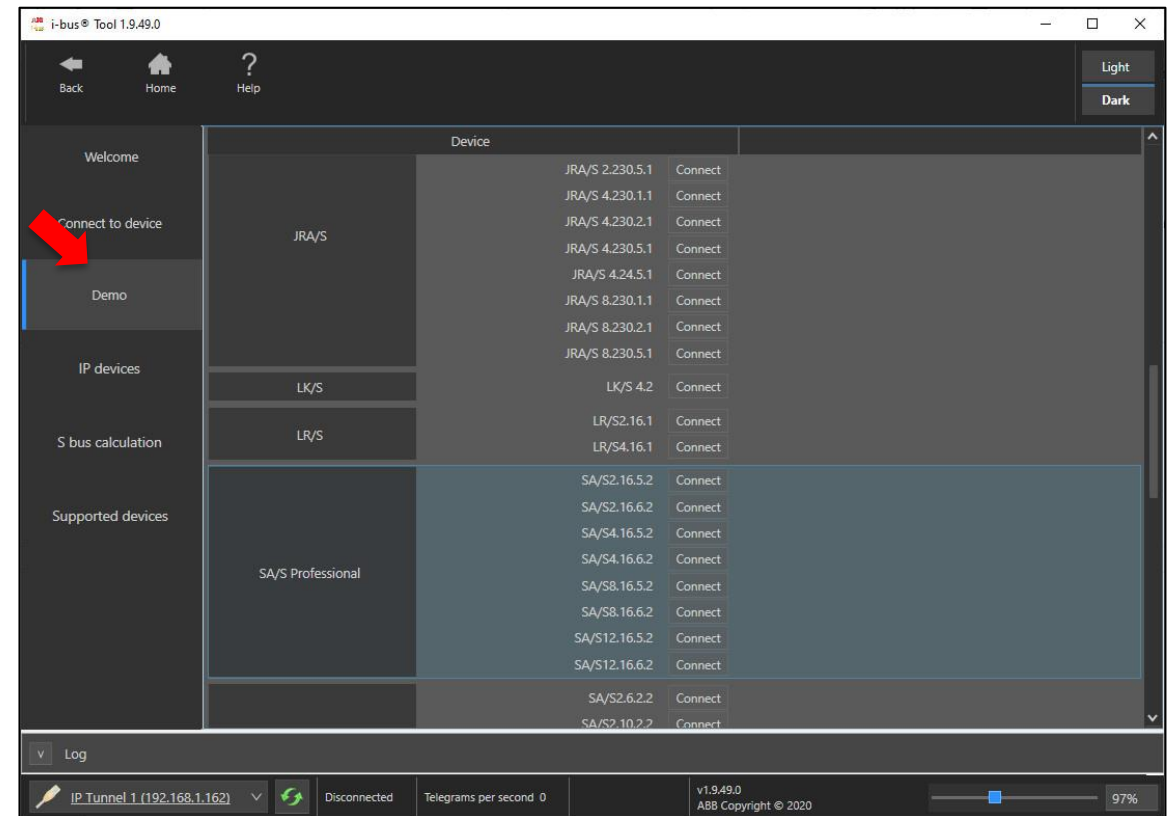


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ABB i-bus® Tool – IP devices: Discovery

- The list displays all supported IP devices (e.g. IP Router IPR/S, Logic Controller ABA/S, Energy Analyzer QA/S)
 - Device name
 - IP address (important for devices with “Auto IP settings”)
 - MAC address
 - Individual address
- If individual devices or all of them are highlighted (set checkmarks), then actions can be performed using the buttons in the upper toolbar:
 - Open web browser
 - Flash LED
 - Restart device
 - Firmware update
- The Checkbox “Detailed data” shows more details about the selected device

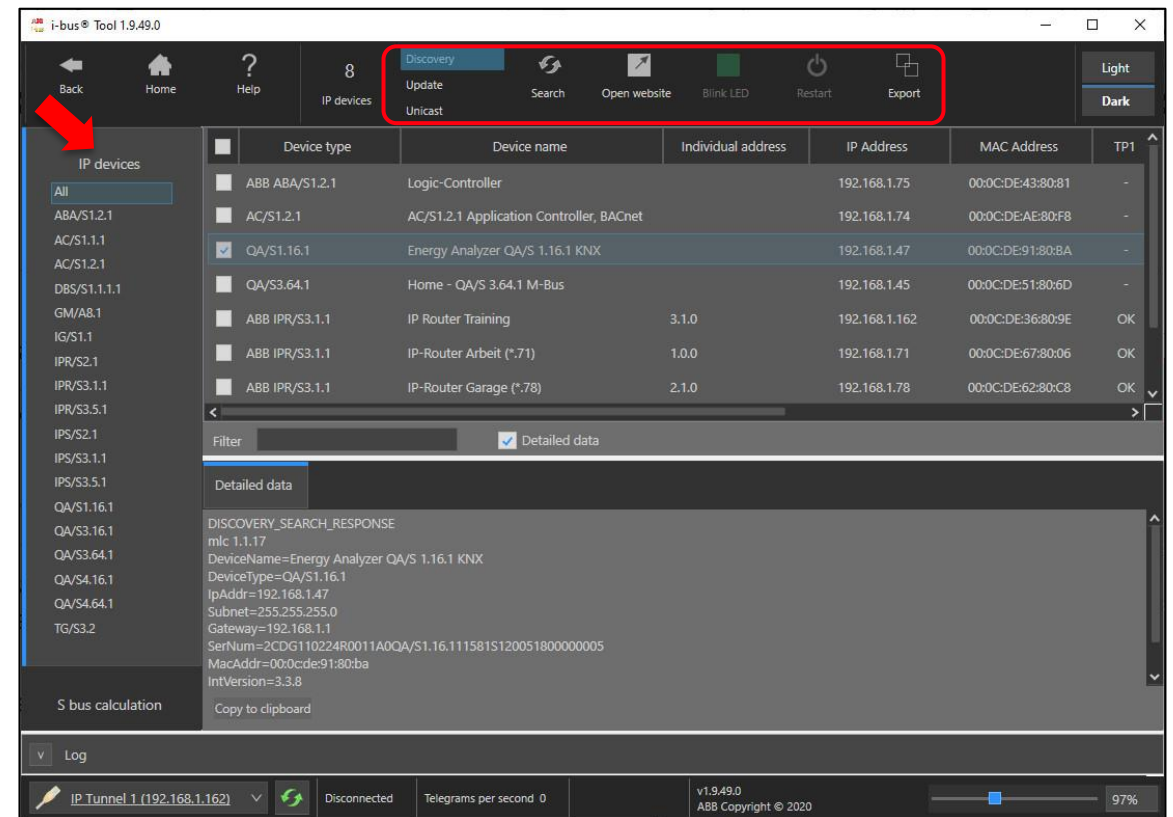


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ABB i-bus® Tool – Connections

The ABB i-bus® Tool accesses an ABB i-bus® KNX device via a standard KNX interface with the assistance of the individual address

- USB Interface (not parallel with ETS)
- KNXnet/IP Tunneling
 - IP Router IPR/S
 - IP Interface IPS/S
- KNXnet/IP Routing
 - IP Router IPR/S

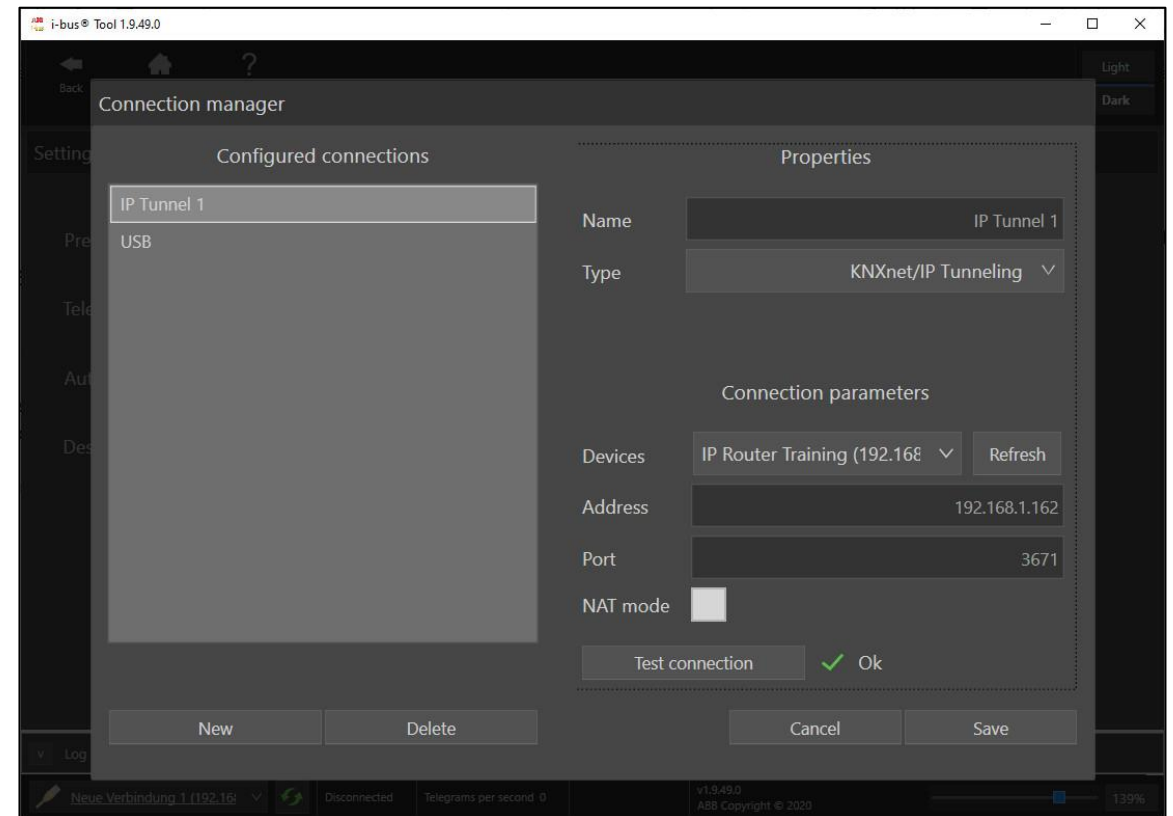


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ABB i-bus® Tool – More information

The ABB i-bus® Tool can be downloaded free of charge at

- www.abb.com/knx → Services & Tools → Engineering Tools
- [Microsite](#) with main information
 - Overview and further details
 - Download → [Link](#)
- Link to webinar “ABB i-bus® Tool – Benefits at a glance” (March 2017)
 - Slides → [Link](#)
 - Video → [Link](#)
- Link to webinar “Various software tools for KNX” (February 2019)
 - Slides → [Link](#)
 - Video → [Link](#)

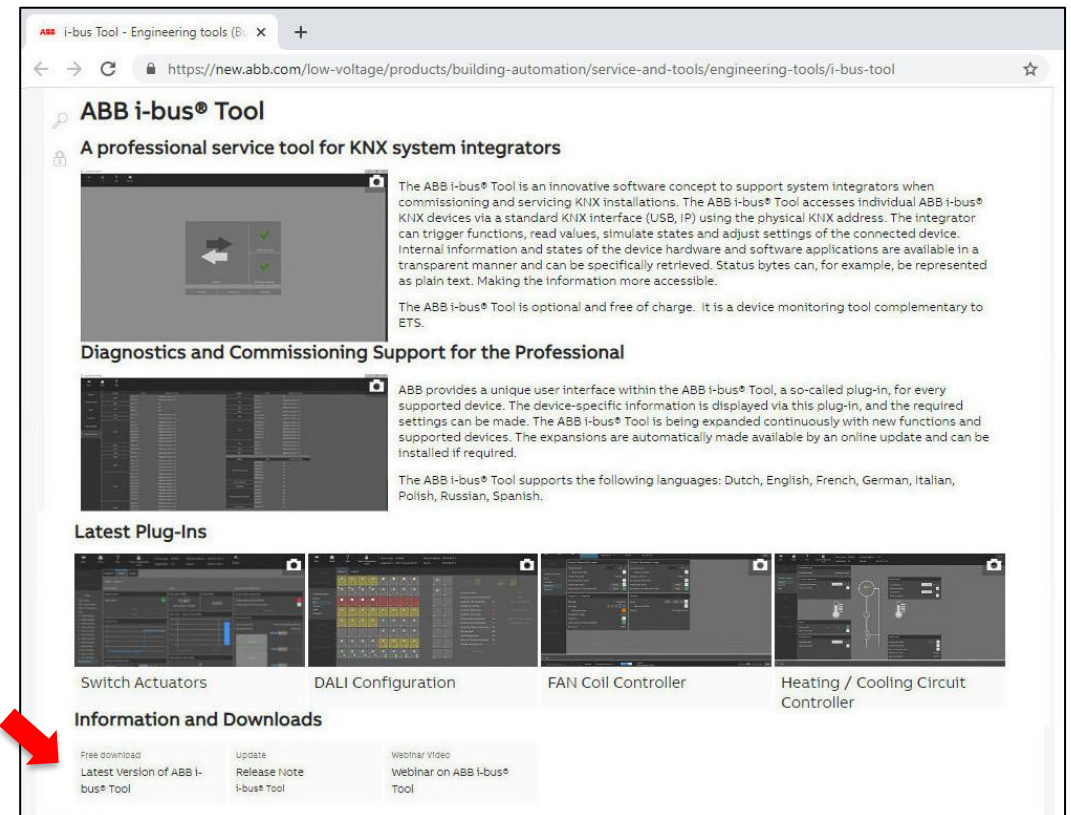


ABB i-bus® Tool and KNX Switch Actuators SA(H)/S

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ABB i-bus® Tool – Function diagram of a Switch Actuator

- Priority of ABB i-bus® Tool
 - The ABB i-bus® Tool has priority over switching (per output and central), time functions, scenes, load shedding, ...
 - If the ABB i-bus® Tool has established a connection with the Switch Actuator, group telegrams are not executed on these group objects
- Priority of safety functions
 - The safety functions
 - Safety priority 1-3
 - Weather alarm (wind 1-3, rain and frost alarm)
 - Block
 - Forced operationhave priority over every other function
 - If one of these safety functions is active, the operation of the output via “Group Objects” and “**ABB i-bus® Tool**” is blocked

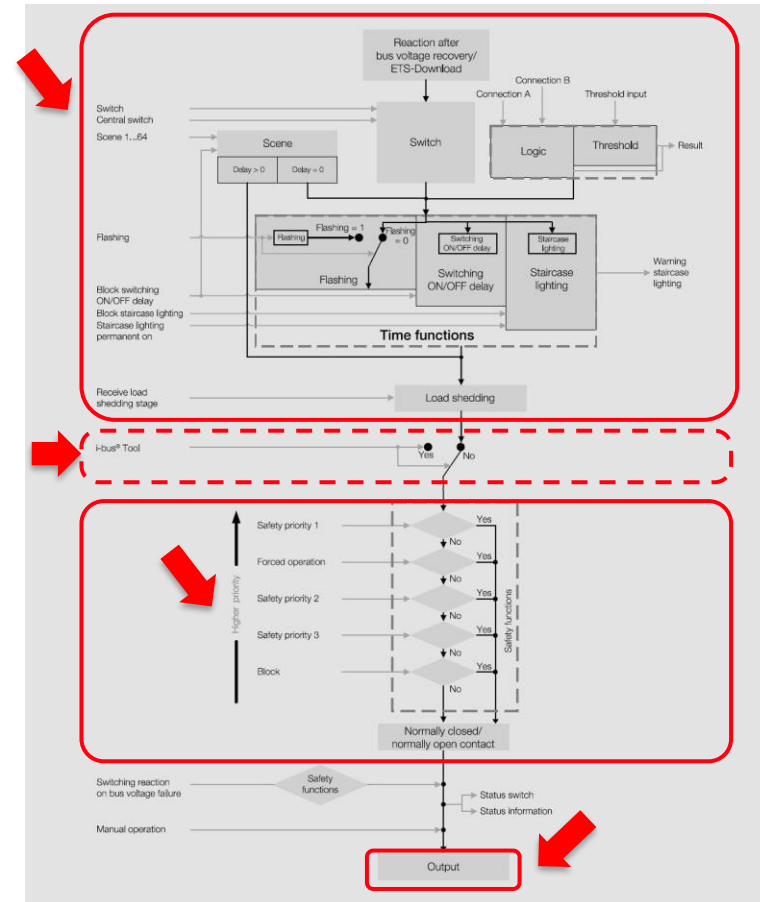


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Connect to a device

- First, the parameters must be set in the ETS and the application loaded into the device
- The parameter “ABB i-bus® Tool access” must be enabled in the KNX device
- No group addresses need to be linked to the group objects
- Configure a KNX interface in the “Connection Manager” (e.g. USB or IP)
- Enter the individual address of the KNX device directly
- Alternatively, the individual address can be read out directly using the “Scan” button (programming button of the KNX device must be pressed)
- Click on “Connect” to establish a connection with the device

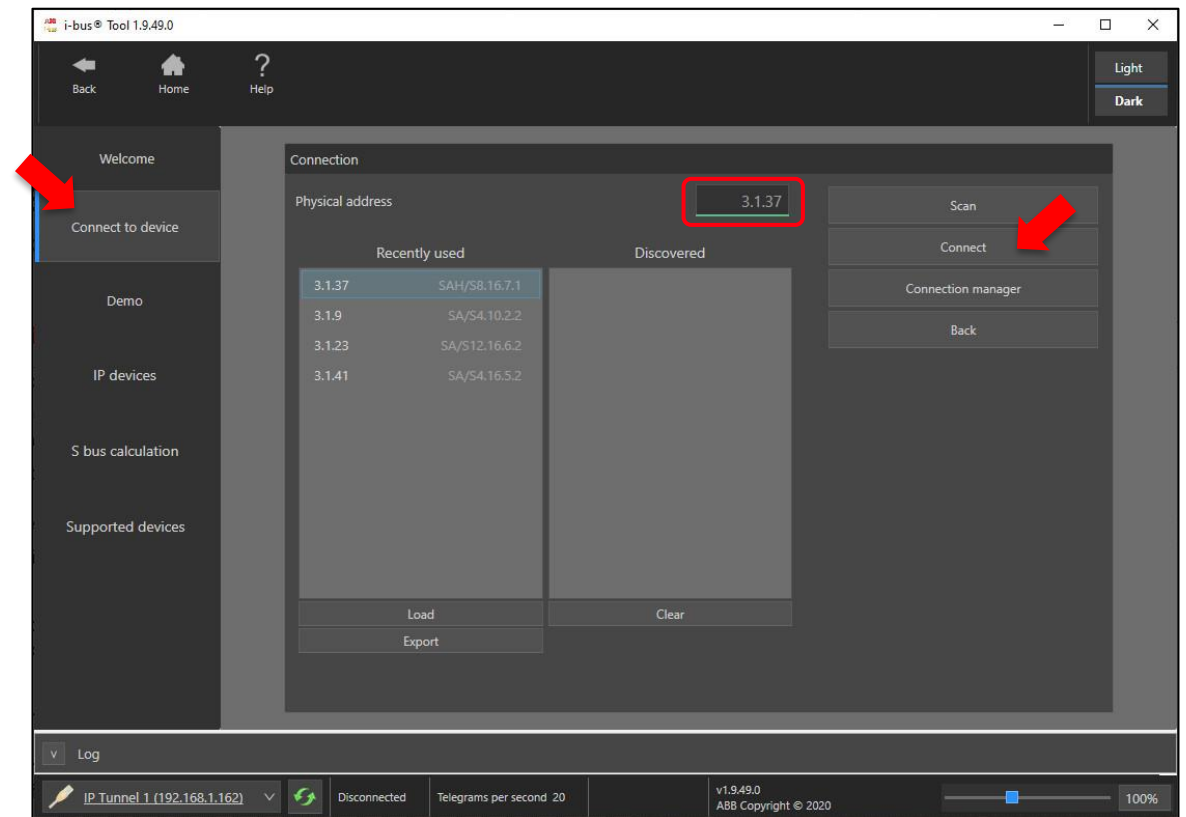


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Connect to a device

- When the connection with a device has been established, “Display mode” is active
- If access to the system is required, then it is necessary to switch to “Configuration mode” first
- The version of the ETS application and the device type are displayed in the “Menu bar”
- If no connection to a device is possible (e.g. message “Connection setup canceled”), check the
 - Version of the firmware and ETS application in the KNX device
 - ETS parameter “ABB i-bus® Tool access”

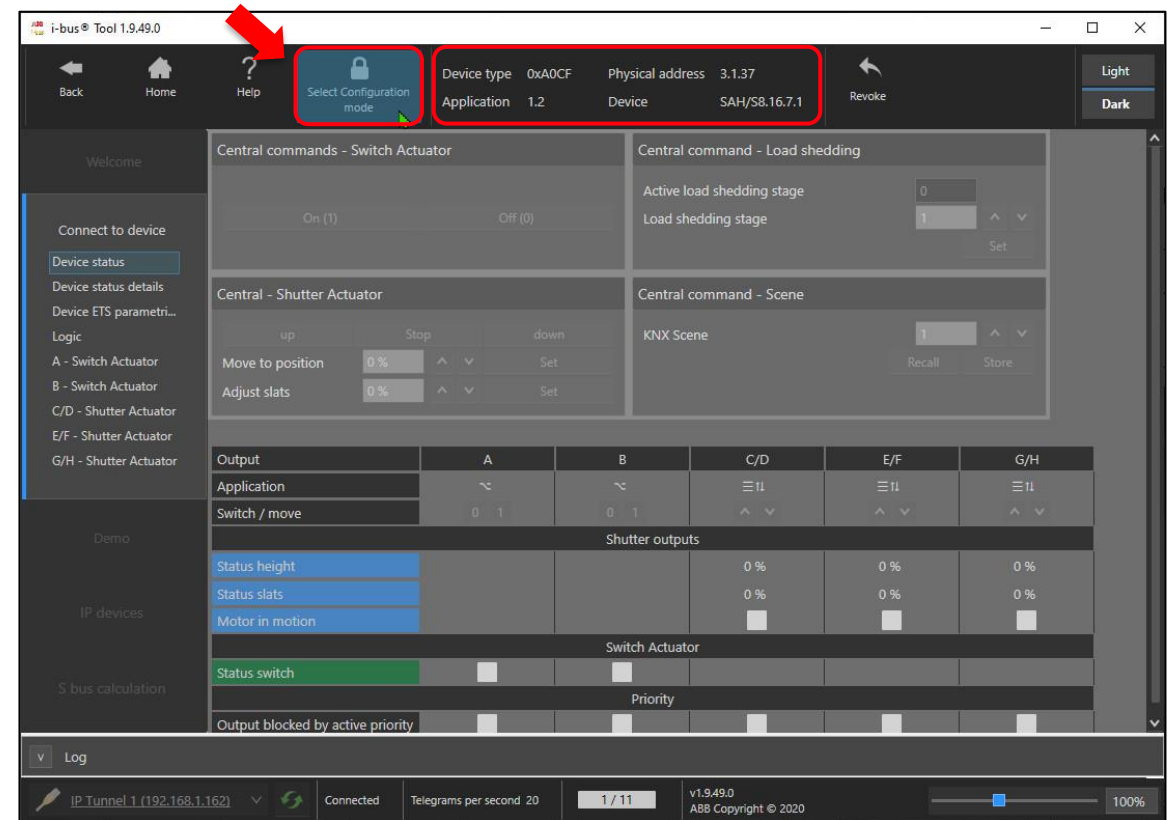


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Revoke

- The “Revoke” button can be used to reset changes made using the ABB i-bus® Tool, e.g.
 - Switch on/off
 - Call a scene
 - Activate/deactivated safety functions
 - Moving the Blind/Shutter up/down, Slat up/down
- The Reset applies to the entire device
- The following changes are not reset and are then retained in KNX operation mode, e.g.
 - Storing a scene
 - Changing values
 - Staircase lighting time
 - Assigned load shedding stage (output)
 - Position for sun (Automatic shading control)

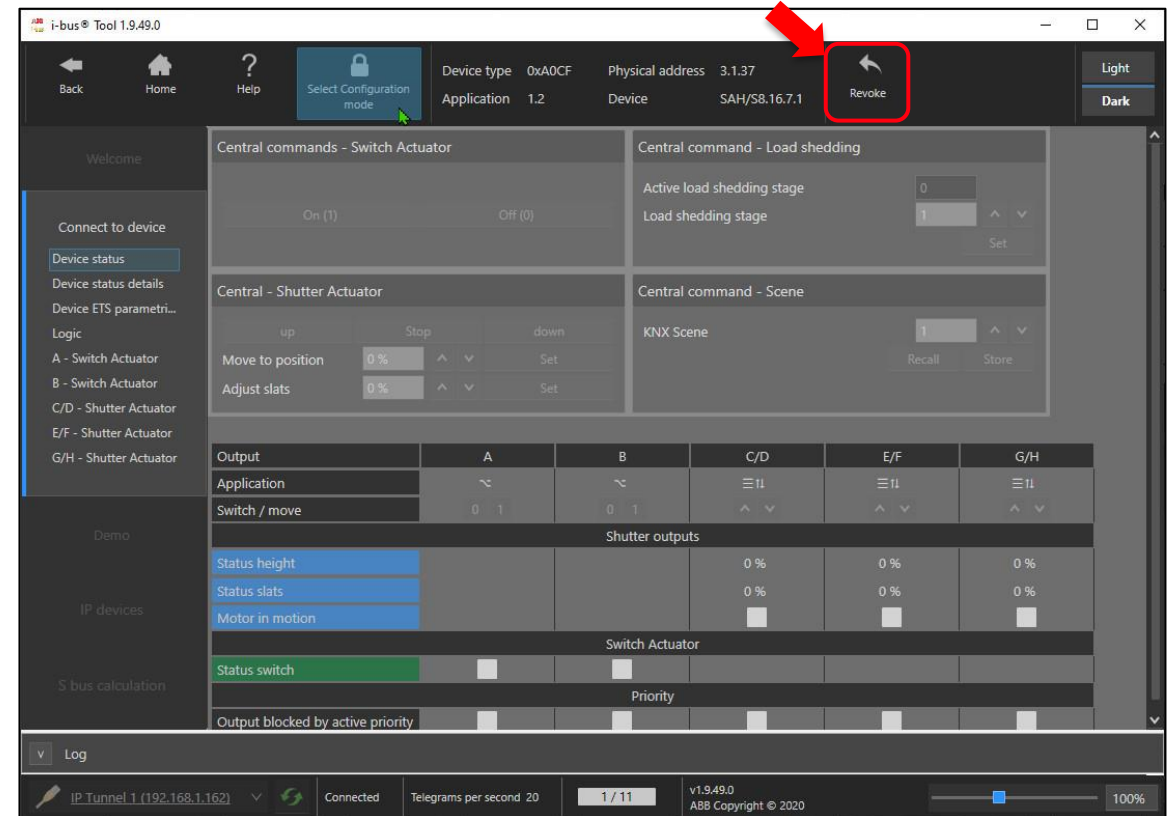


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Device status

- This window shows a brief overview of the status of all outputs of the device
- All outputs of the device can be controlled together using the

- Central commands - Switch Actuator
- Central commands - Shutter Actuator
- Central commands - Load shedding
- Central commands - Scene
- Safety priorities
- Weather alarms
- Overview table
Switch Switch/Move
Status Switch/Height/Slat
Motor in motion
Output is blocked by active priority

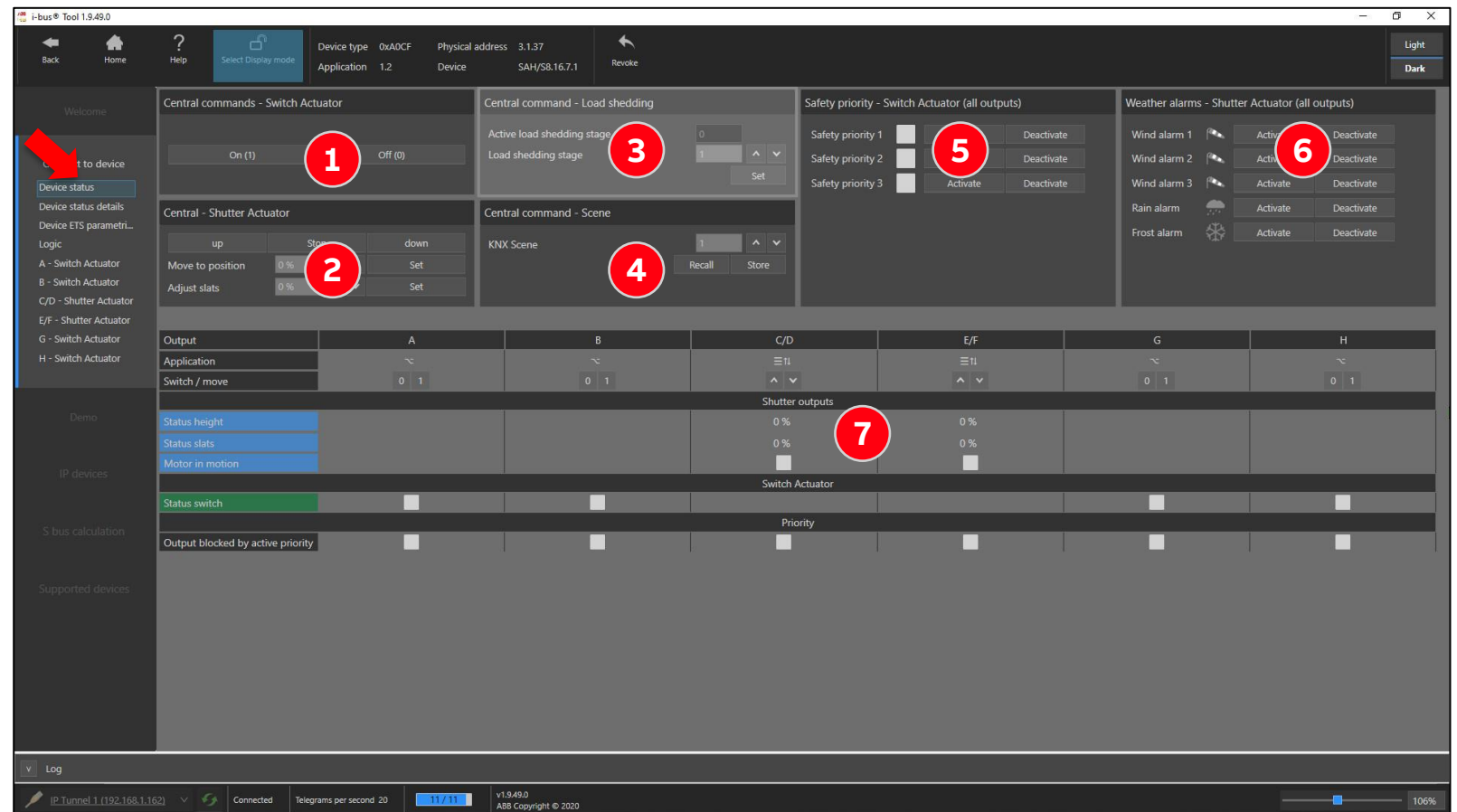


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Device status Details

- This window shows a detailed overview of the status of the outputs
- The entries cannot be changed
- The function that was activated for the output is shown
- If a function was not activated for an output (e.g. staircase lighting), nothing will be displayed for this function (no LED)
- An LED in the first column indicates the status of the function (e.g. wind alarm 1) that was received for the entire device
- For the “Load shedding” and “Logic/Threshold” functions, a number on the LED indicates the number of the assigned load shedding stage or the assigned Logic/Threshold function

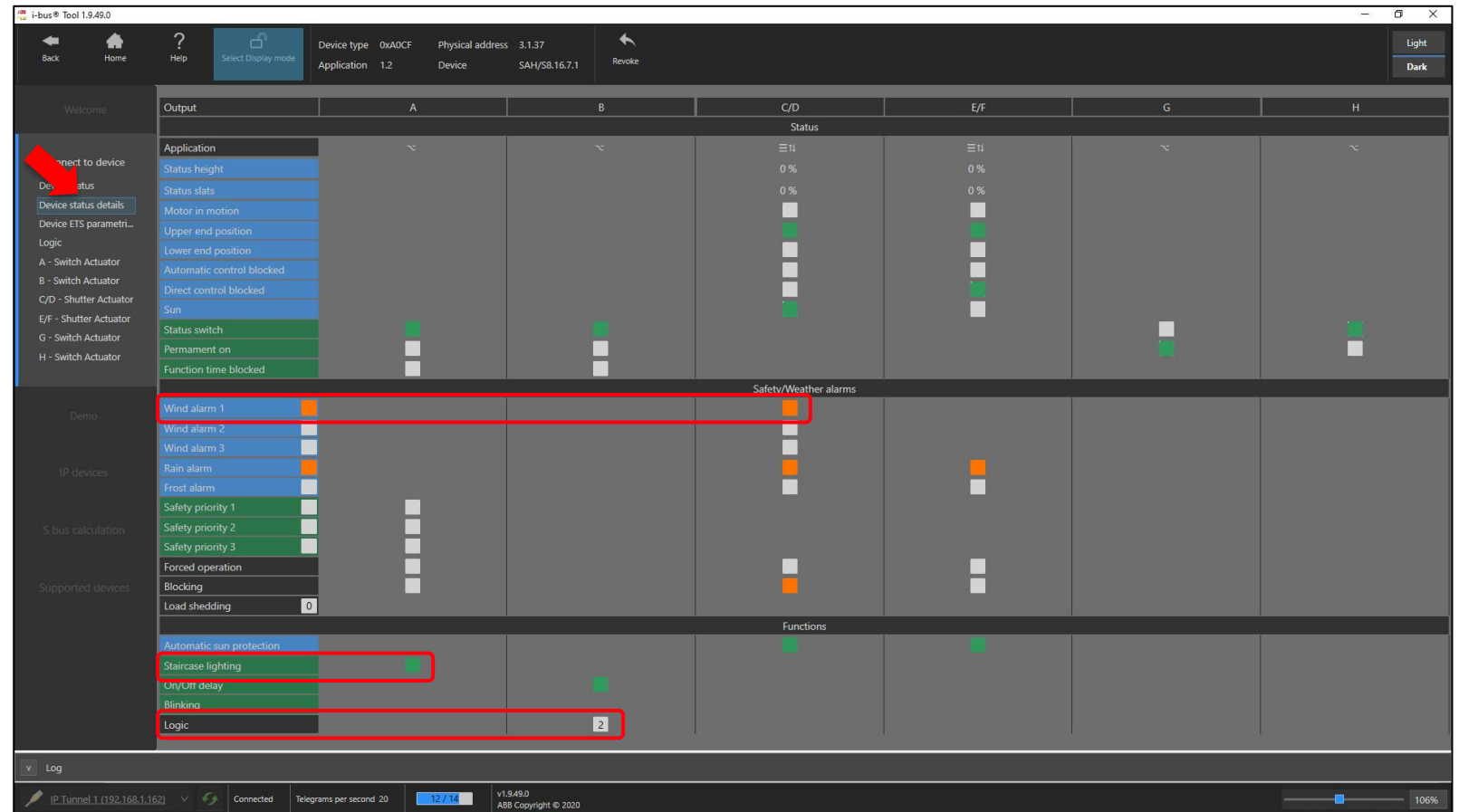


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Device settings ETS

- This window displays a detailed list of the ETS parameter settings for the outputs (e.g. total travel time up, position height on sun)
- The entries cannot be changed
- If a function was enabled for an output (e.g. staircase lighting), the parameter will be displayed for this function

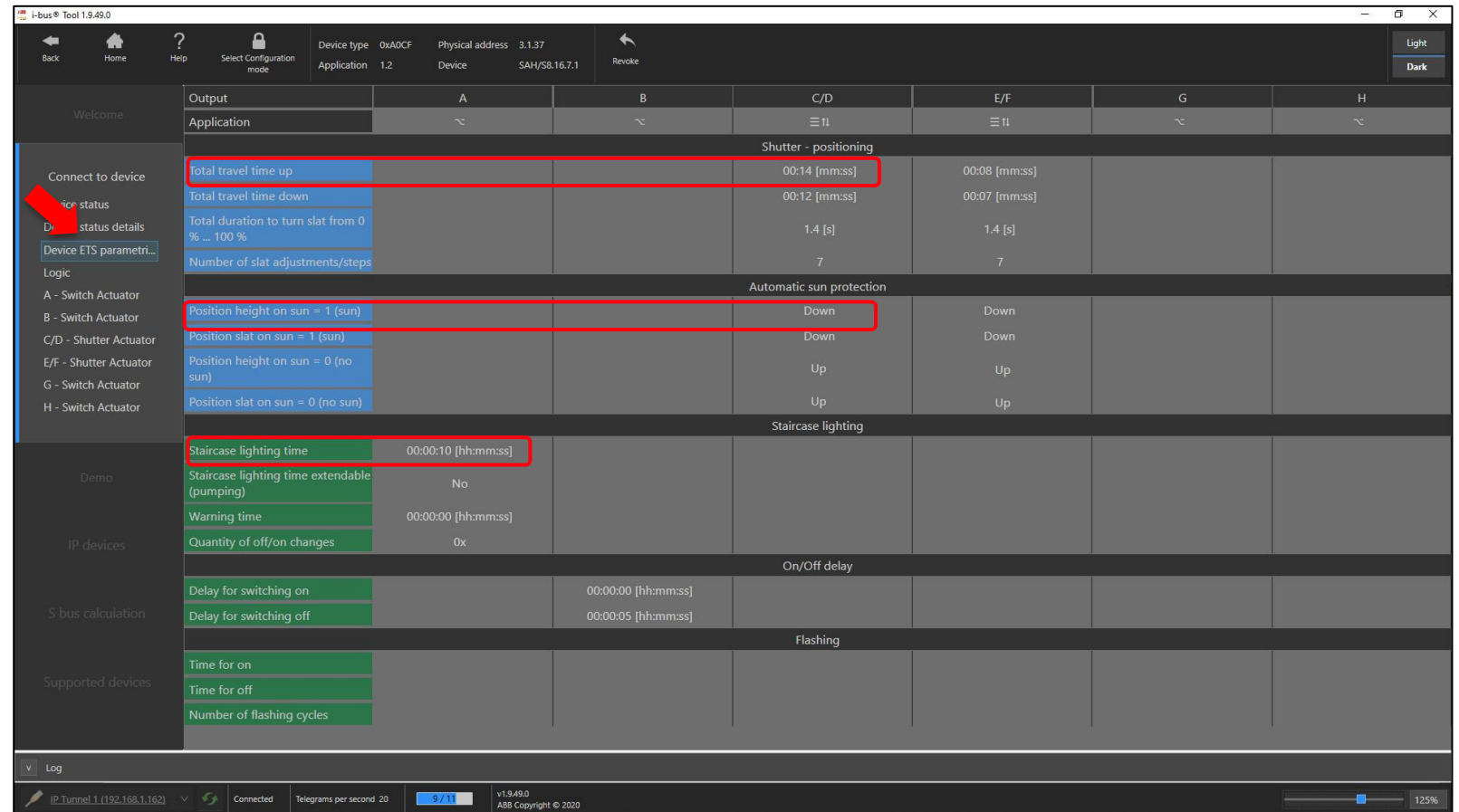


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Logic/Threshold

- The Logic/Threshold functions that are enabled in the device are displayed in this window
- The Logic/Threshold functions are independent functions and are not linked with an output
- However, they can be internally linked to an output
- The parameterized logic function is shown as a function symbol
- The input value can be set using the input fields and the result is displayed in the result field
- The parameterized thresholds, minimum dwell time and the effect on the result are displayed

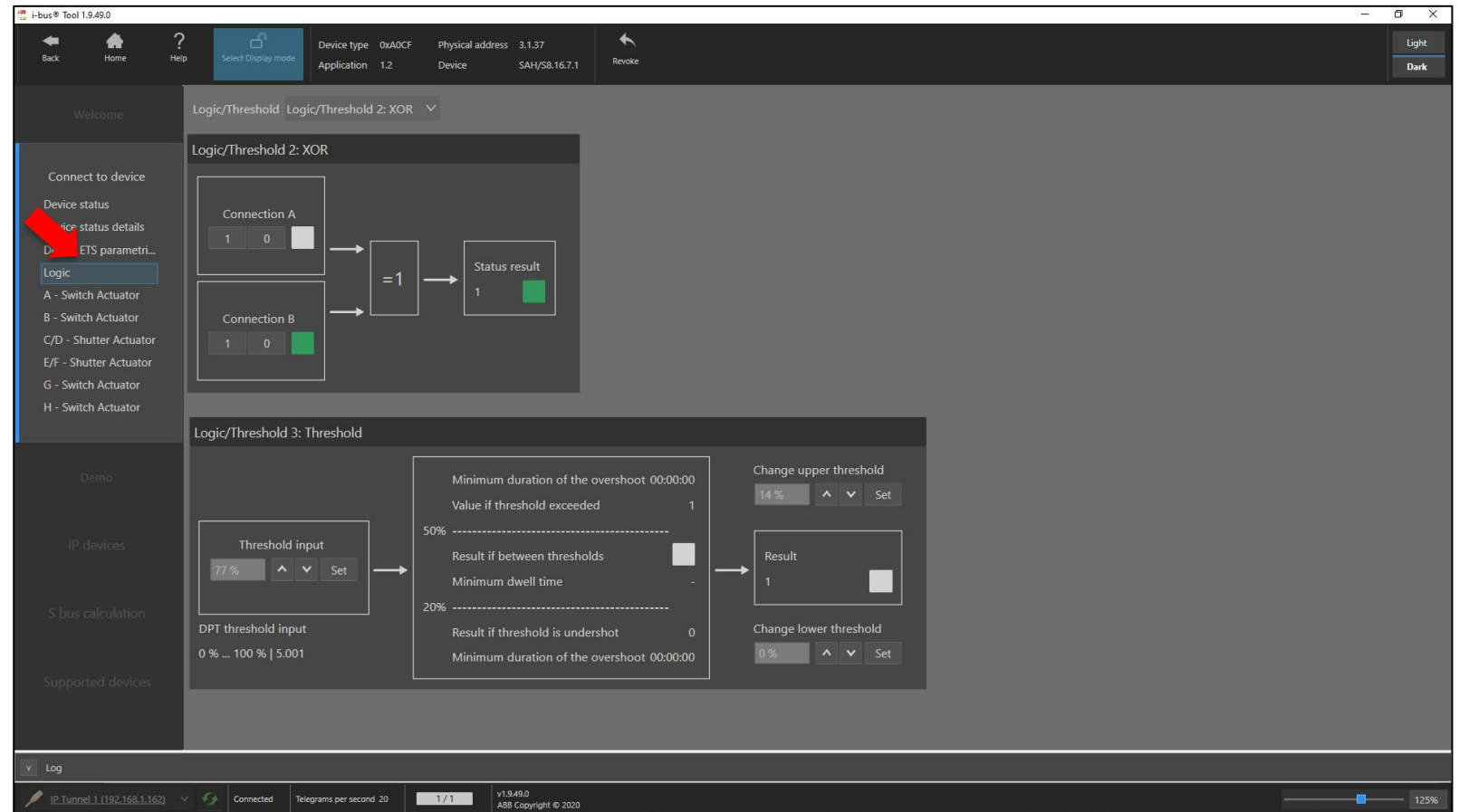


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Switch Actuator

Combi Actuators SAH/S
Switch Actuators SA/S

- The ETS parameter settings for the “Switch Actuator” output are shown in this window
- General
 - Status/Control
 - Assigned safety functions
 - Scenes
 - Staircase lighting/On-Off delay/...
 - Safety priorities & Load shedding (for all outputs)

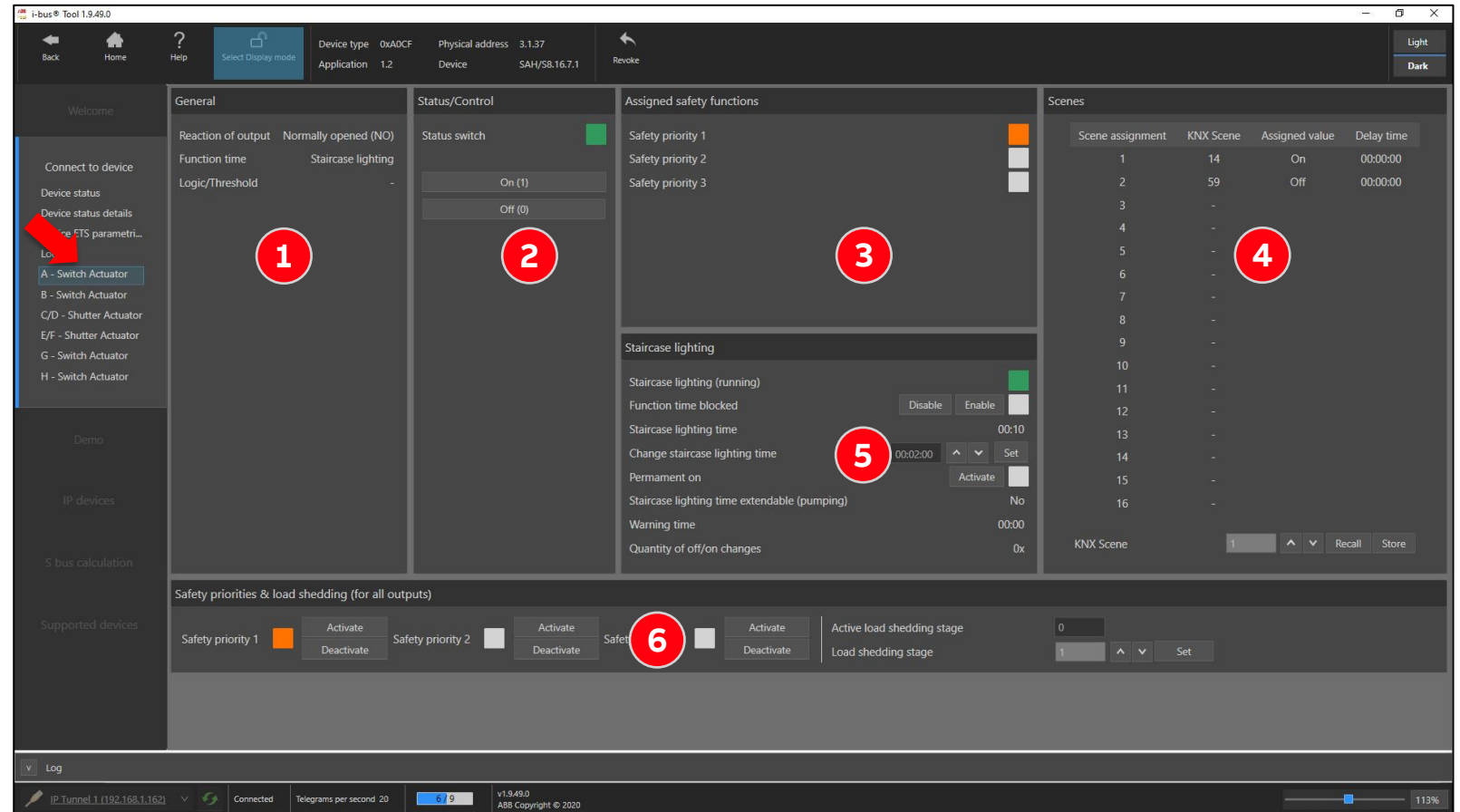


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Shutter Actuator

Combi Actuators SAH/S

- The ETS parameter settings for the “Shutter Actuator” output pair are shown in this window

- General
- Safety/Weather alarms
- Automatic sun protection
- Status/Control
- Scenes
- Weather alarms (for all outputs)

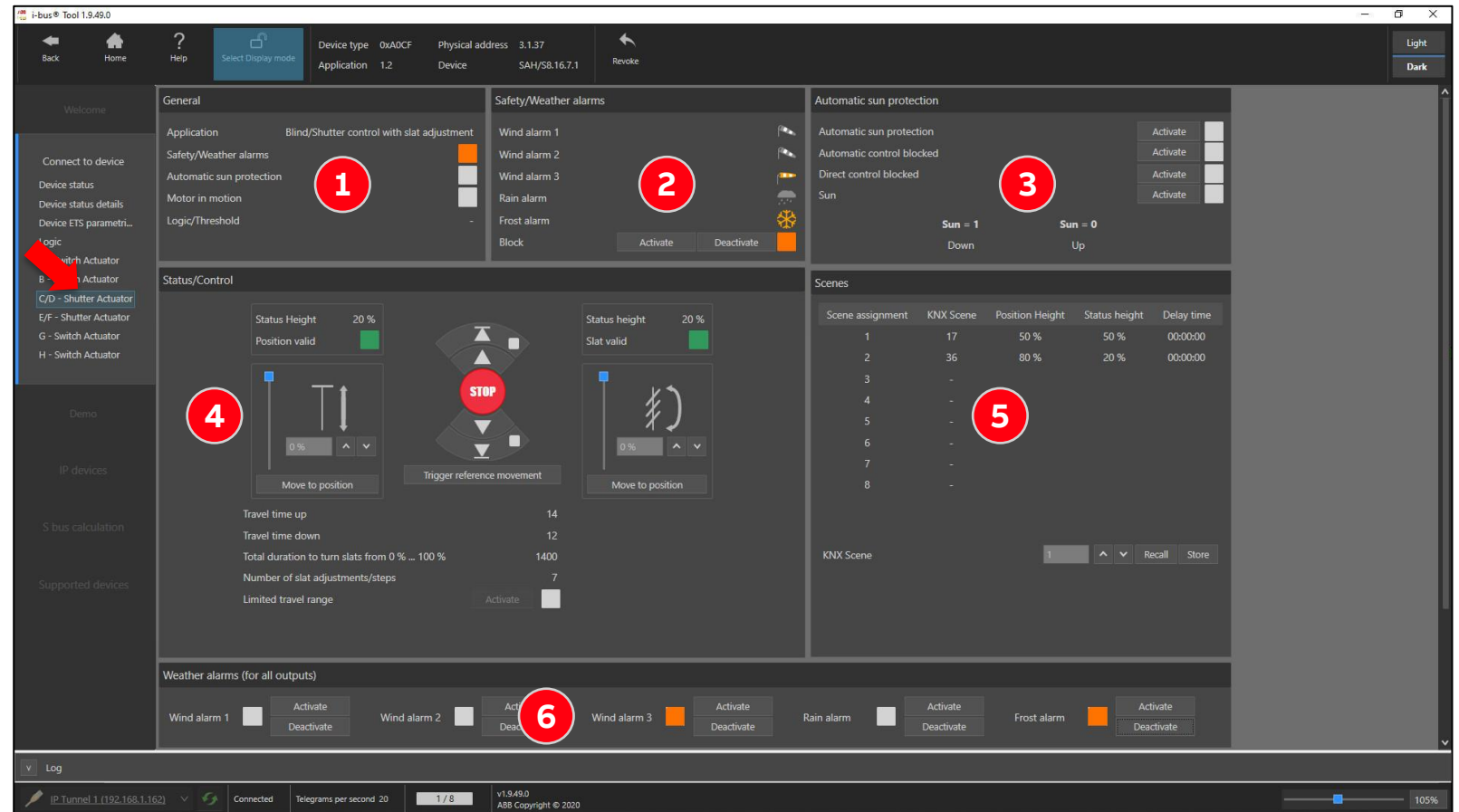


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Switch Actuator

Switch Actuators SA/S with Energy Functions

- The ETS parameter settings for the “Switch Actuator” output are shown in this window
- General
 - Status/Control
 - Assigned safety functions
 - Scenes
 - Load shedding
 - On-Off delay/Staircase lighting/...
 - Energy function
 - Safety priorities (for all outputs)

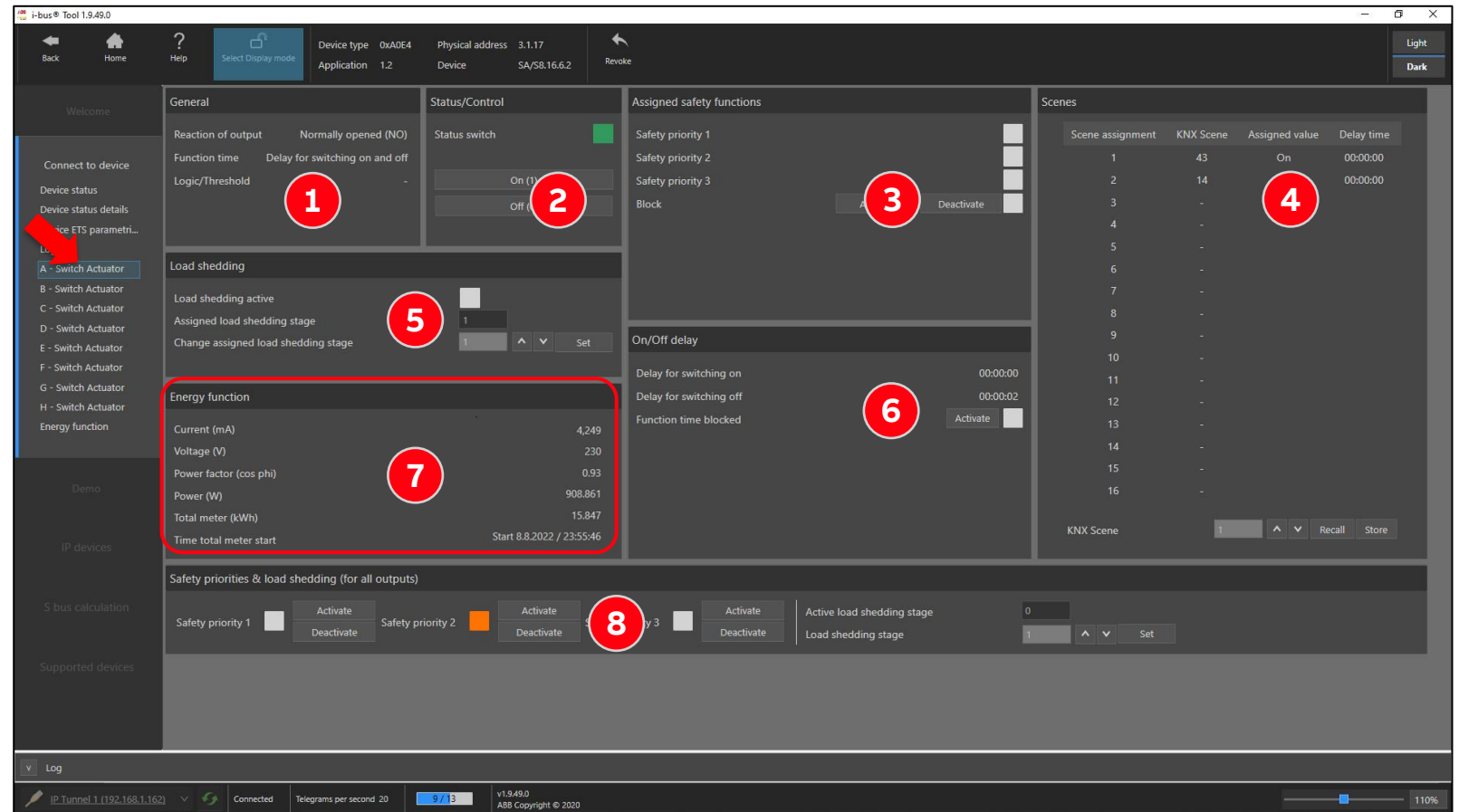


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Energy function

Switch Actuators SA/S with Energy Functions

- The calculated energy values are displayed in this window
- The detail views are selected using the tabs at the top of the window
- Please note that measurement of energy values and calculation of the energy and power values can only be performed if the switch status for the output is known
- In order to calculate and display energy values, the device time and date must be set via KNX
- Even after bus voltage recovery, it is important to ensure that the new device time is received

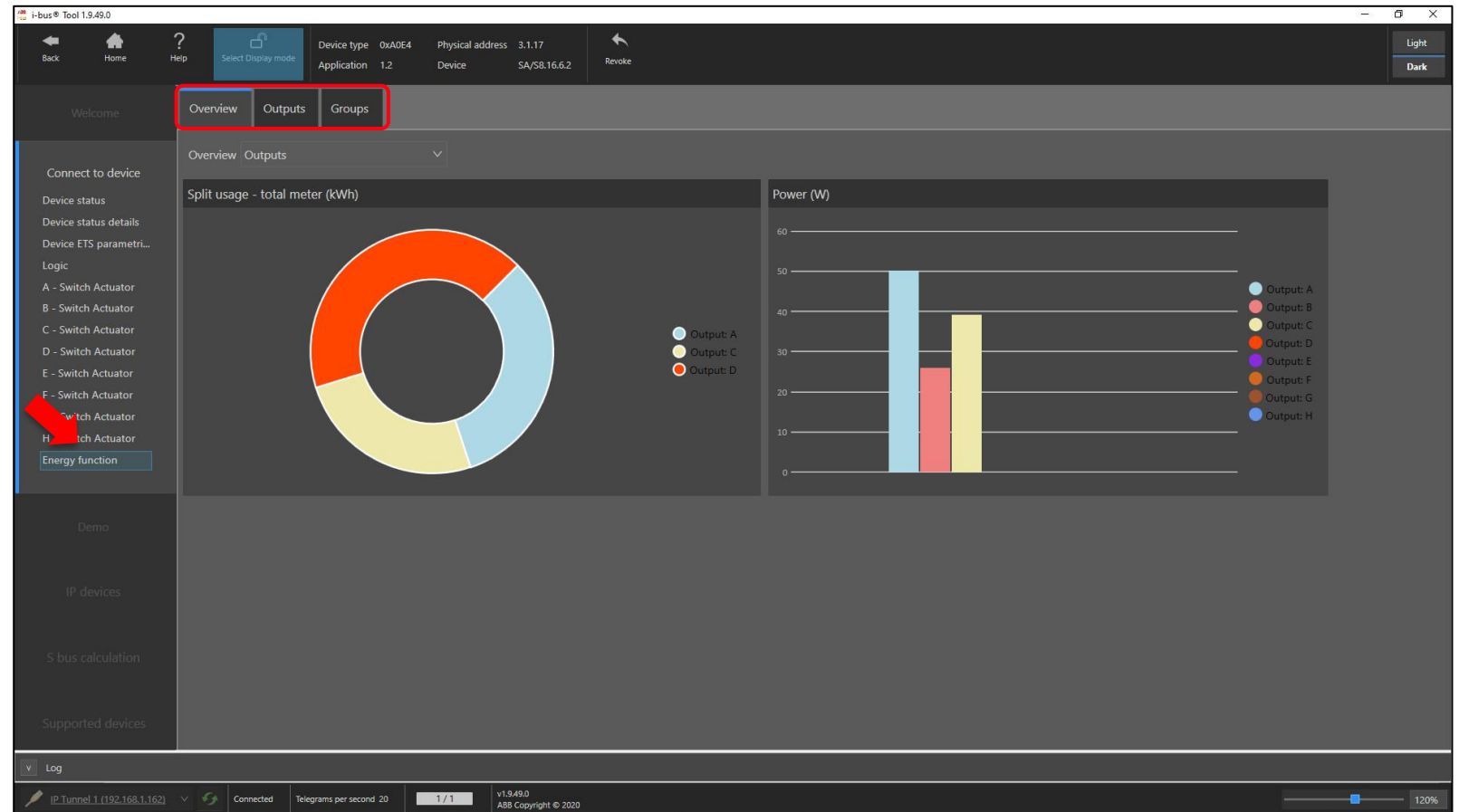


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Energy function

Switch Actuators SA/S with Energy Functions

- An overview of all the device's outputs and energy groups for which an energy function is parameterized is displayed in this window
- It is possible to toggle between the overview of outputs and energy groups in the dropdown list
- The “Split usage” field shows the total energy consumption recorded using the device in a pie chart
- The “Power” field shows the currently recorded power values for the individual outputs/groups

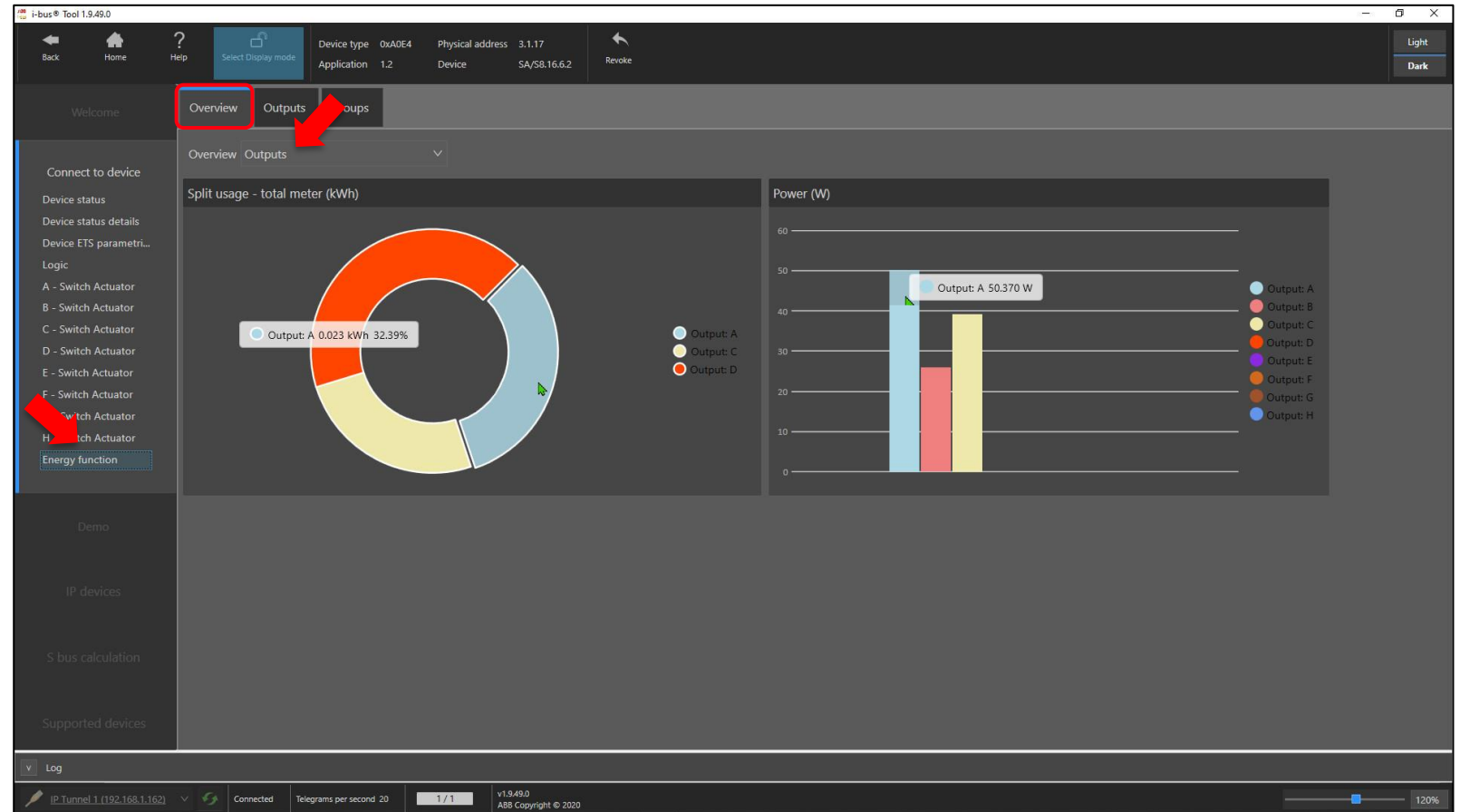


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Energy function

Switch Actuators SA/S with Energy Functions

- Any output with an energy function can be selected in this window
- The following values are displayed for this output if they were enabled in ETS
 - Status/Control
 - Current (mA)
 - Voltage & Power factor
 - Power (W)
 - Total energy (kWh)
 - Today (kWh)
 - Total energy (daily recording, 5 days)
 - Intermediate meter (last three values)
 - Intermediate meter (last three values)
 - Contact monitoring
 - Load monitoring

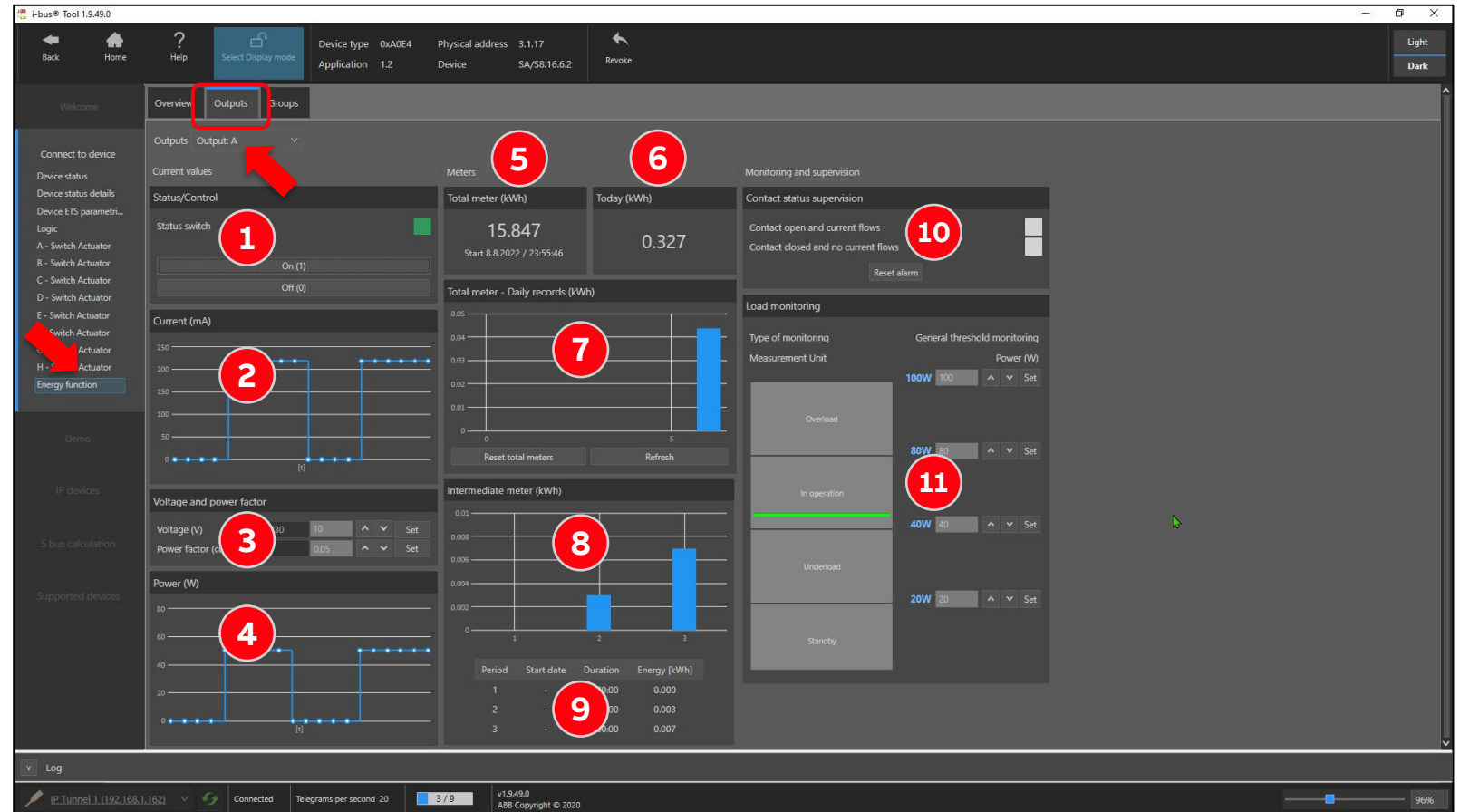


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

ABB i-bus® Tool – Energy function

Switch Actuators SA/S with Energy Functions

- The energy group (1 ... 4) can be selected in this window
- The following values are displayed for the energy group if they were enabled in ETS

1. Current (mA)
2. Power (W)
3. Total energy (kWh)
4. Today (kWh)
5. Total energy (daily recording, 5 days)
6. Load monitoring

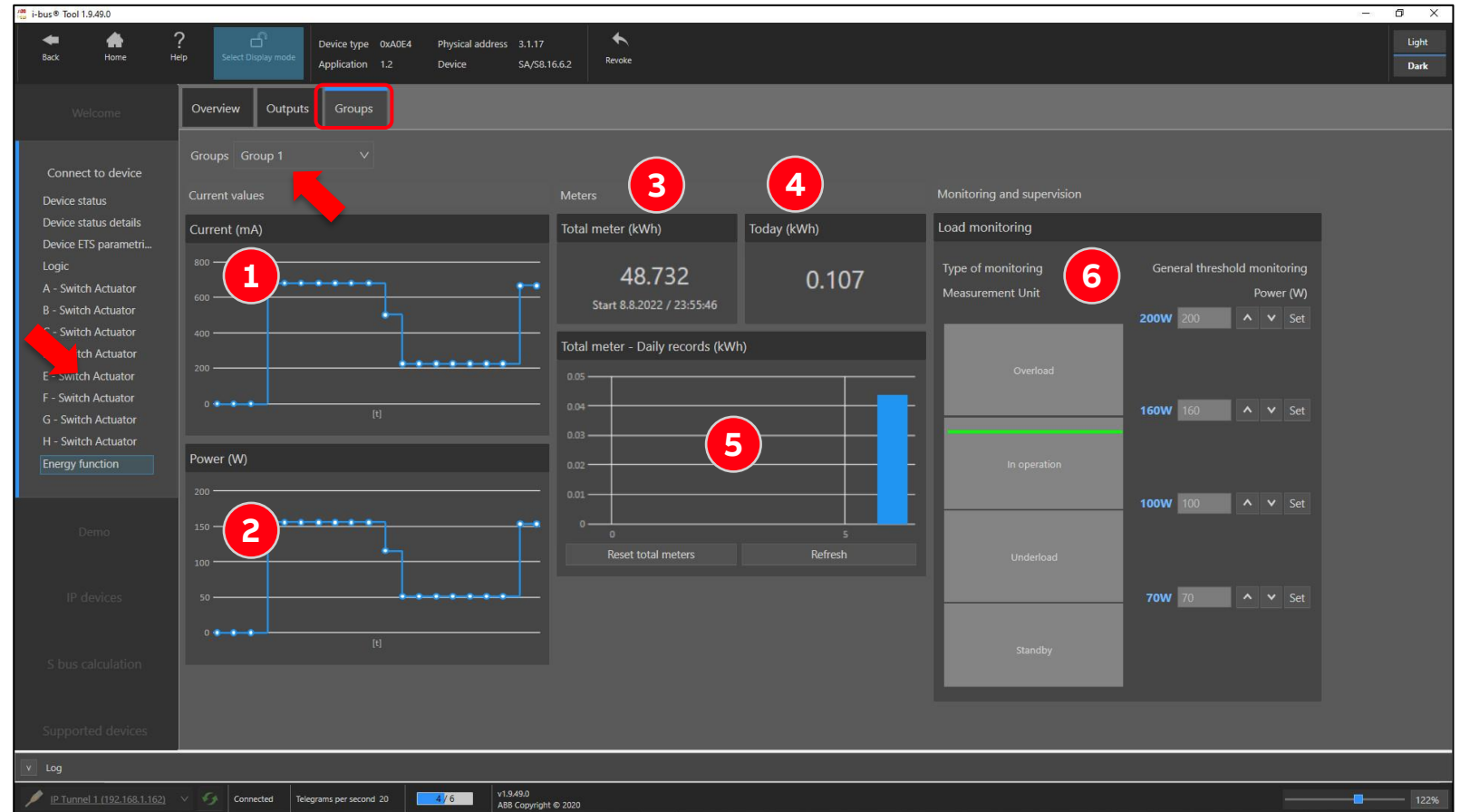


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

Summary

Integration of ABB i-bus® Tool function – A powerful portfolio combined with a powerful tool



Device handling

Quick and easy overview of device status, activated device functions and parameter settings



Troubleshooting

Easy to validate why a channel is not switching as expected (forced operation, load shedding, blocked by a safety alarm)



Commissioning & Maintenance

Observation of real device behavior, e.g., forced operation, staircase function, load shedding stages and logic signals



Energy monitoring

Display of the currently measured current, power and total energy consumption and supervise the load status

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

Training Material

Training & Qualification Database

- The database contains extensive training content
 - Presentations
 - Video tutorials
 - Webinar slides and videos
 - and more ...
- <https://go.abb/ba-training>
- www.abb.com/knx (→ Services & Tools → Training and Qualification → Training Database)

YouTube

- Channel “ABB Home and Building Automation”
- <https://www.youtube.com/user/ABBibusKNX>

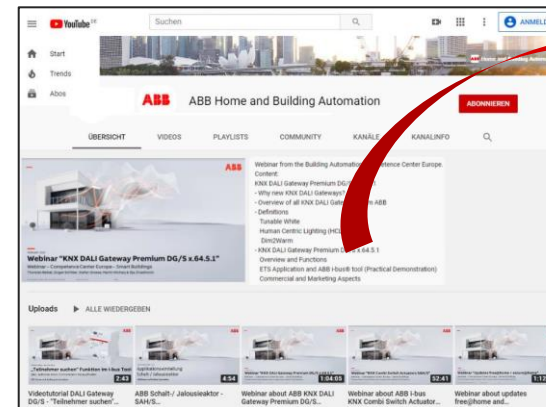
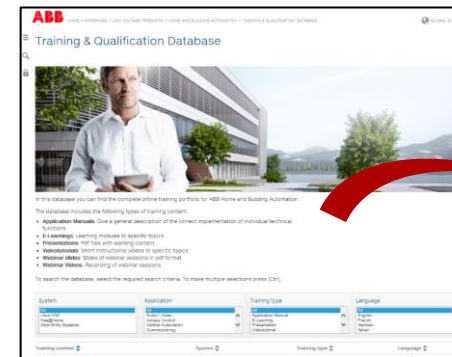


ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S


Webinar

Training & Qualification Calendar

- In addition to the online modules and the traditional training programs offered by your local ABB sales team, we offer a variety of on-site trainings conducted by our specialists at different ABB training facilities
- In this Training & Qualification Calendar you can find the educational events that are taking place during 2023
- <https://go.abb/ba-training> or
- www.abb.com/knx
→ Services & Tools → Training and Qualification → Training Calendar

ABB HOME » ... » BUILDING AND HOME AUTOMATION SOLUTIONS » TRAINING AND QUALIFICATION » TRAINING & QUALIFICATION CALENDAR GLOBAL SITE

Training & Qualification Calendar



In addition to the online modules and the traditional training programs offered by your local ABB sales team, we offer a variety of webinars and on-site trainings conducted by our specialists at different ABB Competence Centers.

System	Date	Location
All	All	All
Door Entry Systems	January 2023	Italy, Sesto San Giovanni
Intrusion Alarm Systems	February 2023	Warsaw, Poland
Fire Alarm Systems	March 2023	Dubai, UAE
HVAC / Mechanical Solutions	April 2023	Webinar

Content	Date	Location	Language
ABB i-bus® Tool supports all KNX Switch Actuators - DETAILS WILL FOLLOW ...	22.02.2023	Webinar	EN
Certified KNX Basic Course / more details: Contact your local ABB	13.03.2023	Germany, Heidelberg	EN
Certified KNX Basic Course / more details: Contact your local ABB	20.11.2023	Germany, Heidelberg	EN
Certified KNX Advanced Course / more details: Contact your local ABB	10.07.2023	Germany, Heidelberg	EN
ABB Cylon Unitron	03.10.23 - 05.10.23	Dublin, Ireland	EN
ABB Cylon® - CXProHD	07.03.23 - 09.03.23	Dublin, Ireland	EN
ABB CYLON® - ASPECT® 3.0	04.04.23 - 06.04.23	Dublin, Ireland	EN
ABB Cylon® - CXProHD	02.05.23 - 04.05.23	Dublin, Ireland	EN
ABB Cylon® - CXProHD	30.05.23 - 01.06.23	Dublin, Ireland	EN

ABB i-bus® Tool supports all KNX Switch Actuators SA(H)/S

Webinar

Homepage

www.abb.com/KNX

→ Services & Tools → Engineering tools

- Latest Version of ABB i-bus® Tool

→ Products and Downloads

→ Outputs

→ Search Options, e.g. SA/S

- ETS Application – new version V1.2
- Product Manual
- Installation and Operating Instructions
- Specification Text
- Selection Table
- ...

The screenshot displays the ABB product details page for the SA/S8.16.6.2 switch actuator. The page includes a navigation bar with 'Data Sheet', 'Downloads', and 'Where to buy'. The 'General Information' section lists the product type, ID, EAN, and catalog description. A 'Long Description' section provides a detailed overview of the device's features and applications. A large image of the switch actuator is shown on the right. Below the main content, there is a 'Categories' section and a 'Declaration of conformity' section. A red arrow points from the 'Downloads' tab to a list of available documents, including the ETS Application, Product Manual, Release Note, and Product Presentation, each with a download icon and file size.

Document	File Size	Download
ETS Application (knxprod) [XX] SA/Sx.16.6.2 Summary: Version 1.2 Software - German, English, Spanish, French, Italian, Dutch, Polish - 2022-11-15	3,21 MB	Download
Product Manual (.PDF) [EN] SA/S x.16.6.2 Summary: Product Manual (.PDF) [EN] SA/S x.16.6.2 (EN) Manual - English - 2022-11-15 - 6,59 MB	6,59 MB	Download
Release Note (.PDF) [XX] SA/Sx.16.6.2 Summary: Release Note SA/S x.16.6.2 Release note - German, English - 2022-11-15 - 0,15 MB	0,15 MB	Download
Product Presentation (.PDF) [EN] KNX Switch Actuators & ABB i-bus Tool Summary: KNX Switch Actuators & ABB i-bus Tool Presentation - English - 2022-09-26 - 0,30 MB	0,30 MB	Download

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