Special Documentation
SOPAS ET 3.0

Connection establishment
Information on using the program

Endress+Hauser
People for Process Automation

Described product
Product name: SOPAS ET 3.0

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Legal information

Original document
This document is an original document of Endress+Hauser SICK GmbH+Co. KG.

Warning Symbols


IMMEDIATE HAZARD
of severe injuries or death


Hazard (general)


Hazard by electrical voltage

Hazard in potentially explosive atmospheres


Hazard by explosive substances/mixtures


Hazard by unhealthy substances


Hazard by toxic substances

Warning Levels / Signal Words

DANGER
Risk or hazardous situation which *will* result in severe personal injury or death.

WARNING
Risk or hazardous situation which *could* result in severe personal injury or death.

CAUTION
Hazard or unsafe practice which *could* result in personal injury or property damage.

NOTICE
Hazards which *could* result in property damage

Information Symbols

Information on product condition with regard to protection against explosions (general)


Information on product characteristics related to European Directive ATEX

Information on product characteristics related to explosion protection in accordance with the IECEx scheme.


Important technical information for this product


Important information on electric or electronic functions


Nice to know


Supplementary information


Link referring to information at another place

Glossary

AC	Alternating Current
ATEX	ATEX: Atmosphères Explosifs: Abbreviation for European standards that govern safety in potentially explosive atmospheres
CSA	Canadian Standards Association (www.csa.ca)
DC	Direct Current
HF	High Frequency, e. g., HF pulses (high frequency pulses)
IEC	International Electronical Commission
IECEx	IEC system for certification in accordance with standards for devices for use in potentially explosive atmospheres
IP*xy*	Ingress Protection: Degree of protection of a device in accordance with IEC/DIN EN 60529; *x* specifies the protection against contact and impurities, *y* protection against moisture.
LF	Low Frequency, e. g., LF pulses (low-frequency pulses)
MDR	Manufacturer Data Record
NAMUR	Abbreviation for "Normen-Arbeitsgemeinschaft für Mess- und Regeltechnik in der chemischen Industrie", now "Interessengemeinschaft Automatisierungstechnik der Prozessindustrie" (www.namur.de)

SOPAS ET 3.0

1 Important Information

About this document
For your safety
System requirements

1.1 About this document

This document provides basic information on the software SOPAS ET V3.0.

1.2 For your safety.

WICHTIG:

- ► Read the corresponding Operating Instructions carefully before using a device.
- ► Special attention must be paid to all safety instructions and warnings for assembly, installation and operation of the device!

1.3 System requirements

Laptop/PC with:

- Processor: Pentium III (or comparable type)
- VGA graphics card
- USB interface (alternative - RS232 via adapter)
- Working memory (RAM): At least 1 GB
- Operating system: MS Windows XP, Vista, Windows 7 and Windows 8 (32/64 bit)

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2 Connection establishment

Connecting to the device
Changing the language

2.1 Connecting to the device

► Connect the USB cable to the MCU control unit and the laptop/PC.

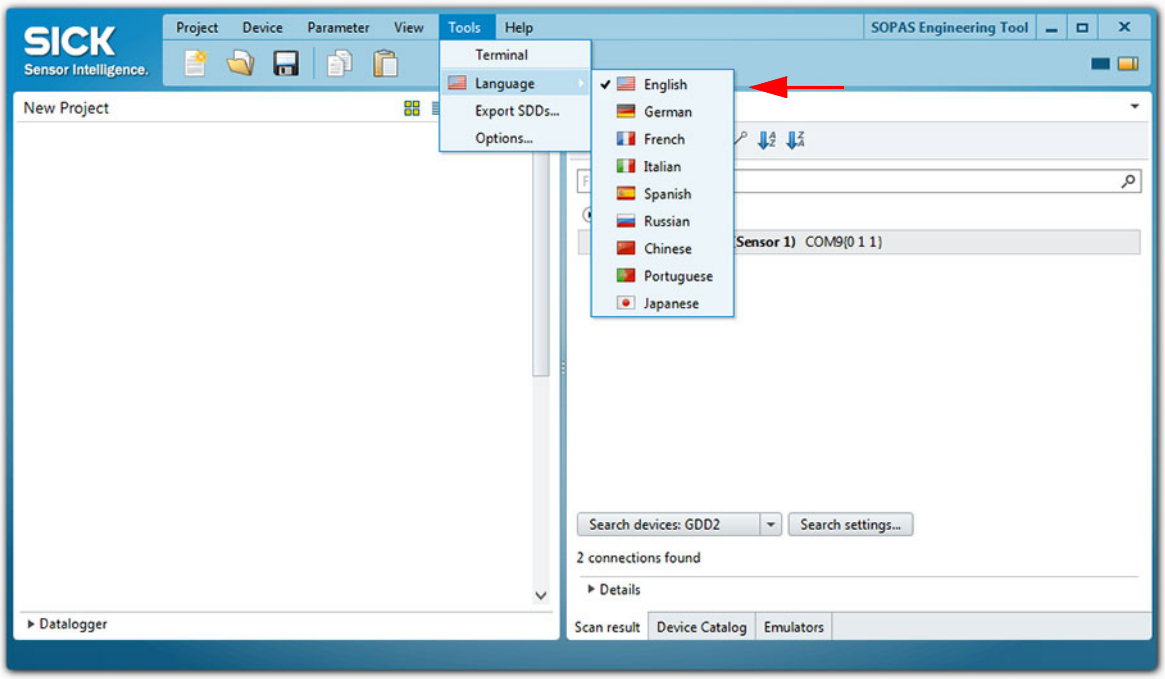
> ***NOTICE:***
> The MCU(P) is connected via USB to the laptop/PC.
> A serial interface (COM port) is simulated via which the connection is made.

► Start the program in the “SICK\SOPAS” start menu.
► The start page is displayed.

2.1.1 Changing the language

► If required, select the desired language in the “Tools / Language” menu (→ pg. 4, Fig. 1).
► Confirm the dialog shown with “Yes” to restart SOPAS ET with the changed language.

Fig. 1 Changing the language

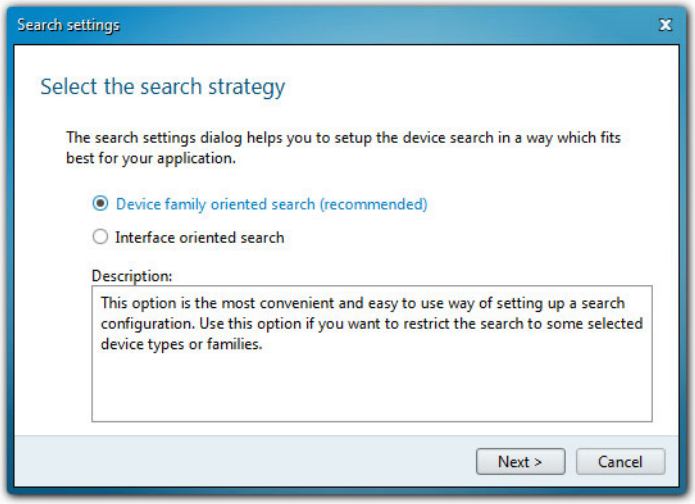


2.1.2 Connecting to the device via the “Device family” mode (recommended search settings)

1 Click “Search settings”.

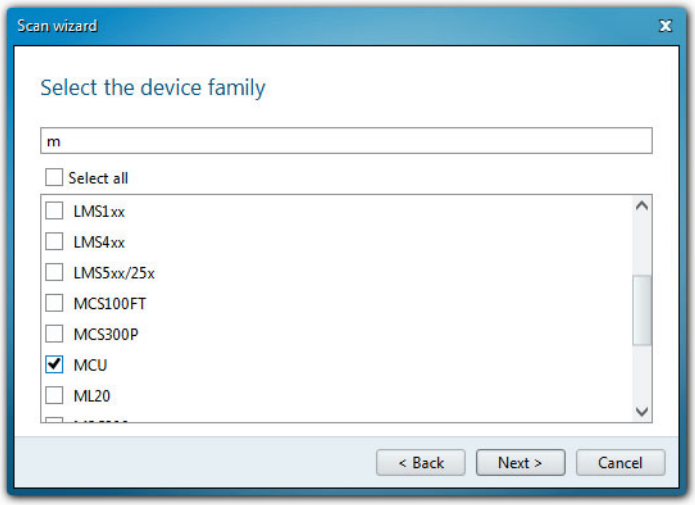
2 Select search mode “Device family oriented search” and click “Next”.

Fig. 2 Selecting the search mode



3 Select device family “MCU” and click “Next”.

Fig. 3 Selecting the device family



4 If devices are to be connected via Ethernet, configure the IP addresses:

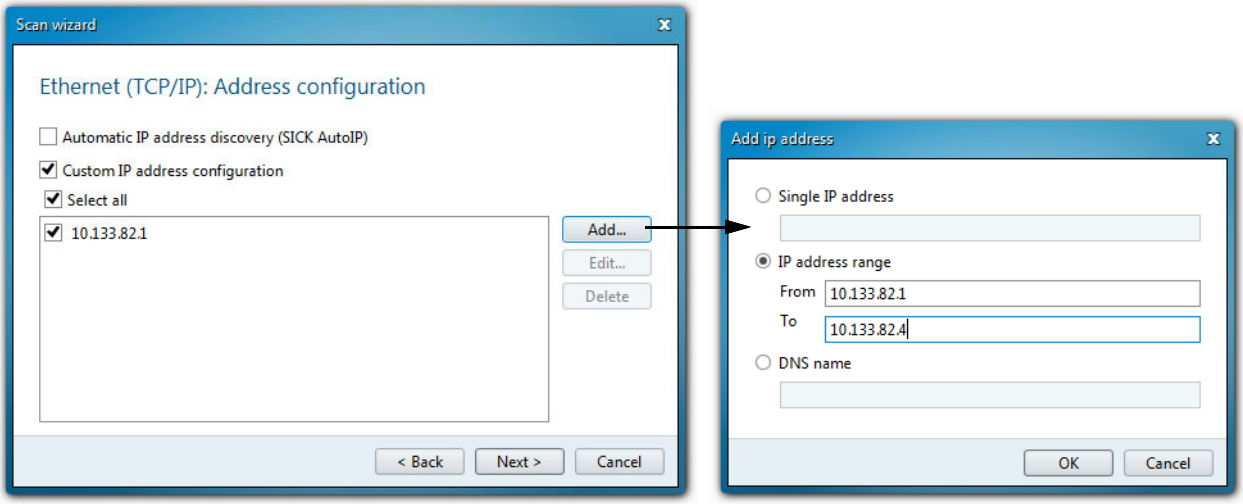
NOTICE:
MCU(P) does not support automatic recognition of IP addresses (SICK AutoIP), the IP addresses therefore have to be configured manually.

► Click “Add”.

An IP address specified by the customer is entered at the factory if the address is available when the device is ordered. If not, standard address 192.168.0.10 is entered.

► Enter the IP address of the device or the IP address range when several devices are used and confirm with “OK” (→ pg. 6, Fig. 4). The IP addresses shown are exemplary.
► Click “OK”.

Fig. 4 Connection settings for connection via Ethernet (example)

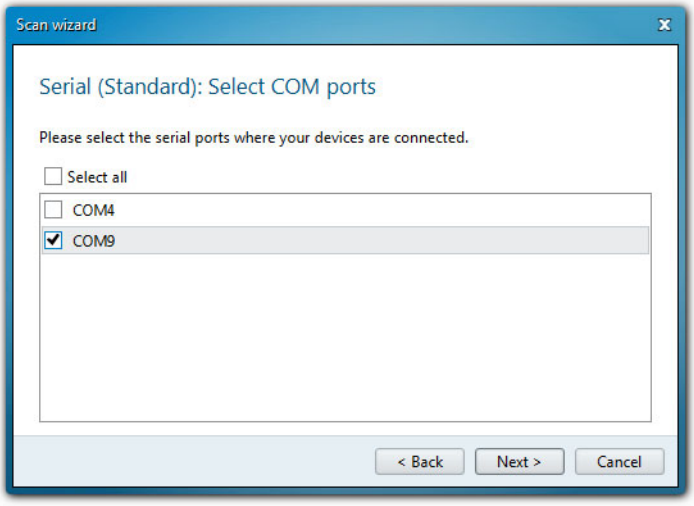


5 Click “Next”.
6 When devices are connected via serial connections (COM ports), select the COM ports used and click “Next”.

NOTICE:
The MCU(P) is connected via USB to the laptop/PC.
A serial interface (COM port) is simulated via which the connection is made.

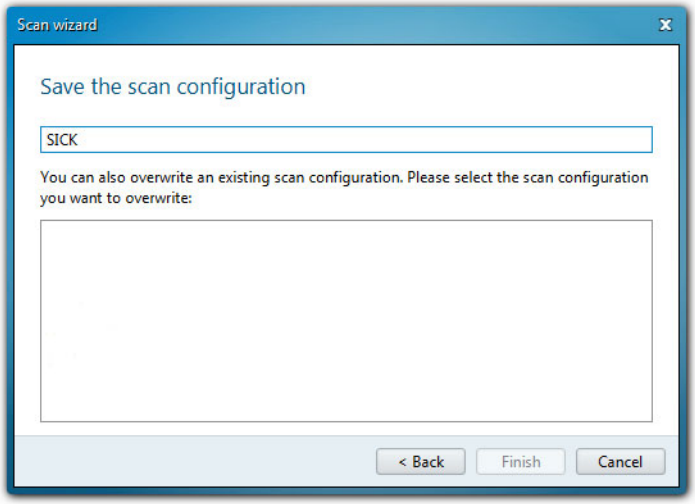
► If you are not sure which COM ports are used, select all COM ports.

Fig. 5 Selecting COM ports



7 To save the search settings, enter a name and click “Finish”.
SOPAS ET starts the device search.
The devices found are displayed in the “Device search” area when device search is finished (→ pg. 12, Fig. 12).

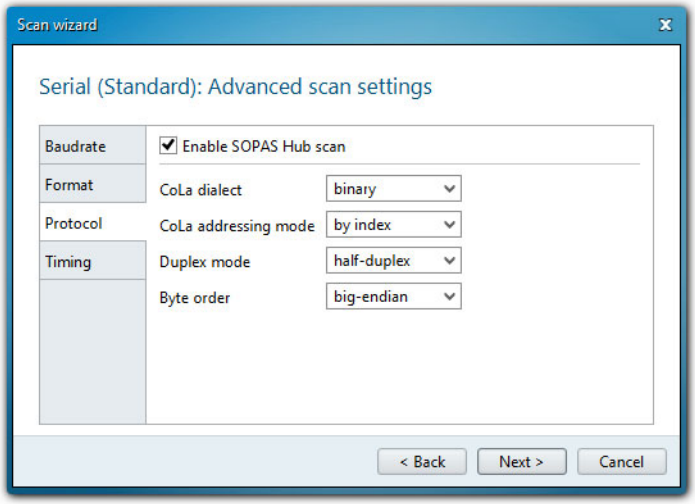
Fig. 6 Saving the scan settings



2.1.3 Connecting to the device with advanced mode

1 Click “Search settings”.
2 Select search mode “Interface oriented search”.
3 Select the communication interfaces where the search is to be made and click “Next”.

Fig. 7 Selecting the communication components

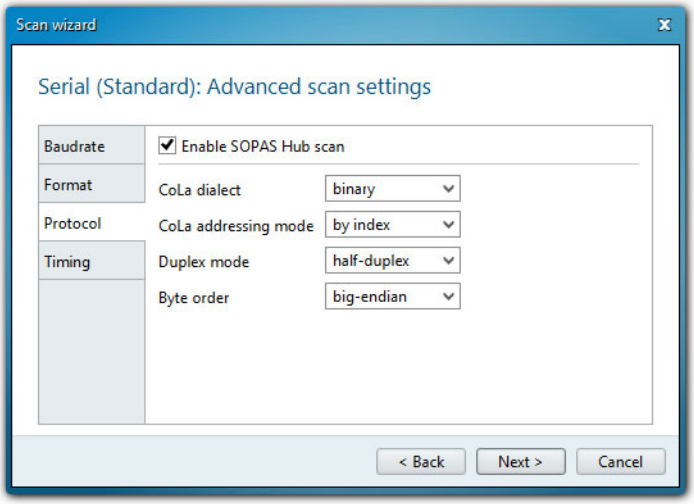


4 Configure the interfaces and click “Next”.

Ethernet communication

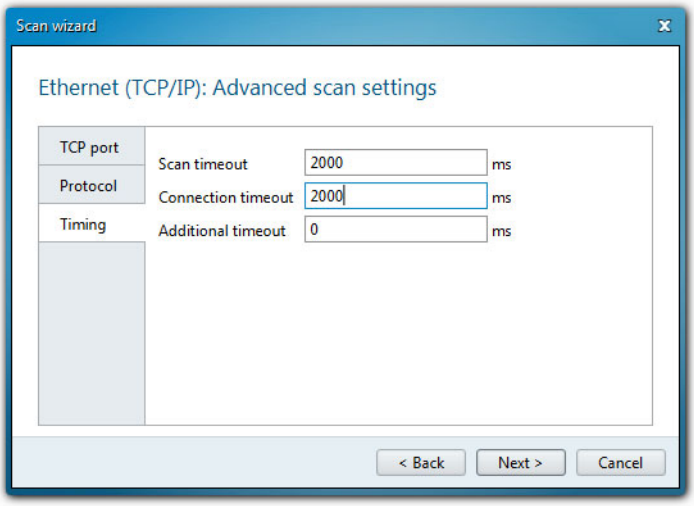
- ► Select “Custom IP address configuration”.
- ► Click “Add”.
- ► Enter the IP address of the device or the IP address range when several devices are used and confirm with “OK”.
- ► Select TCP port 2111 in the “TCP port” directory.
- ► Define the protocol settings in the “Protocol” directory according to → pg. 8, Fig. 8.

Fig. 8 Defining the protocol settings



- ► Define the timeout settings in the “Timing” directory according to → Fig. 9.

Fig. 9 Defining the timeout settings

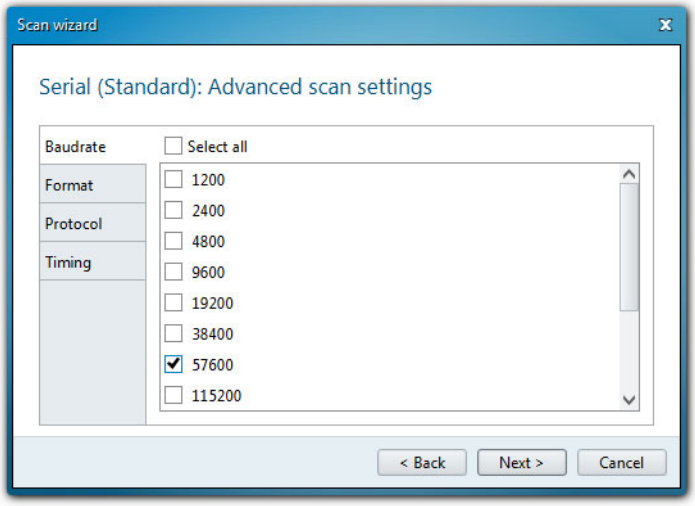


Serial communication (when connected via USB)

> ***NOTICE:***
> The MCU is connected via USB to the laptop/PC.
> A serial interface (COM port) is simulated via which the connection is made.

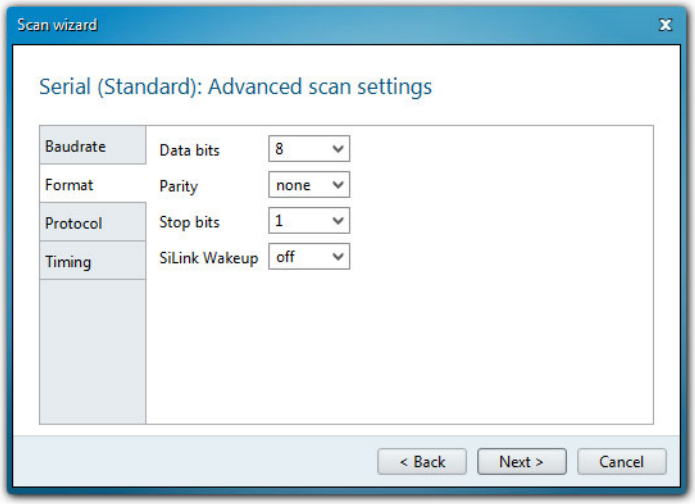
- ► Select the COM ports used.
- ► If you are not sure which COM ports are used, select all COM ports.
- ► Define the baudrate settings in the “Baudrate” directory according to → pg. 9, Fig. 10.

Fig. 10 Defining the baudrate



- ► Configure the data format in the “Format” directory according to → pg. 9, Fig. 11.

Fig. 11 Configuring the data format



- ► Define the protocol settings in the “Protocol” directory according to → pg. 7, Fig. 7.
- ► Define the timeout settings in the “Timing” directory according to → pg. 8, Fig. 8.

5 To save the scan settings, enter a name and click “Finish” (→ pg. 7, Fig. 6).
SOPAS ET starts the device search. The devices found are displayed in the “Device search” area when device search is finished (→ pg. 12, Fig. 12).

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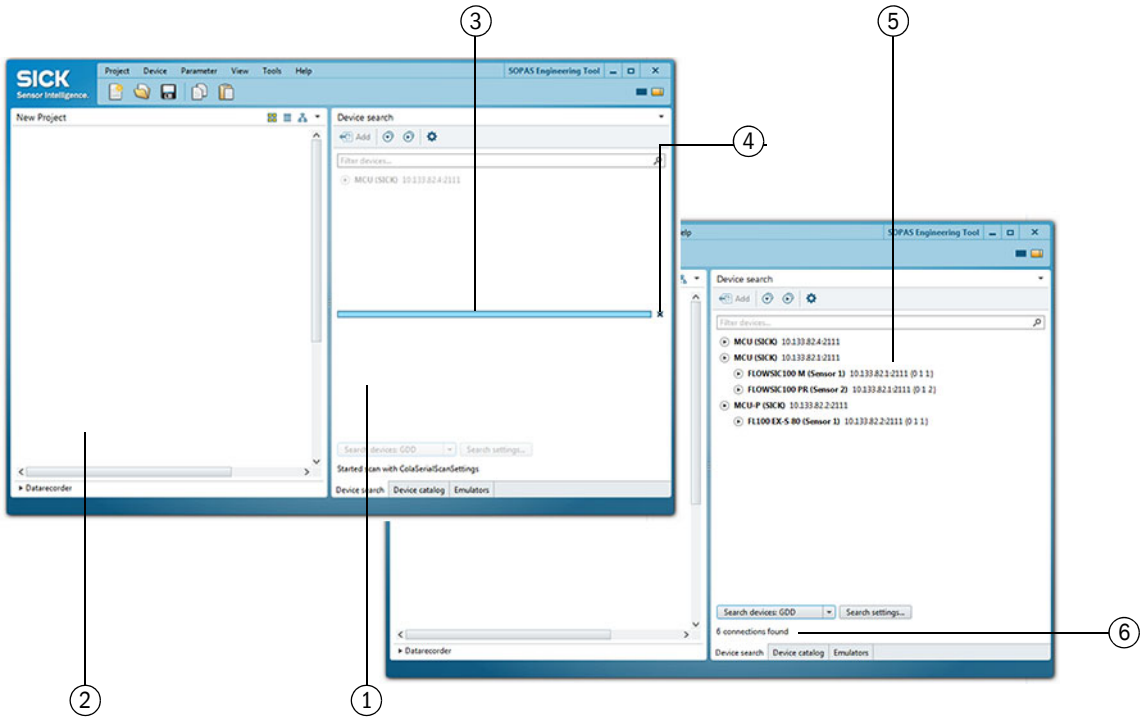
3 Information on using the program

Overview
Device selection
Device context menu

Fig. 12 Overview

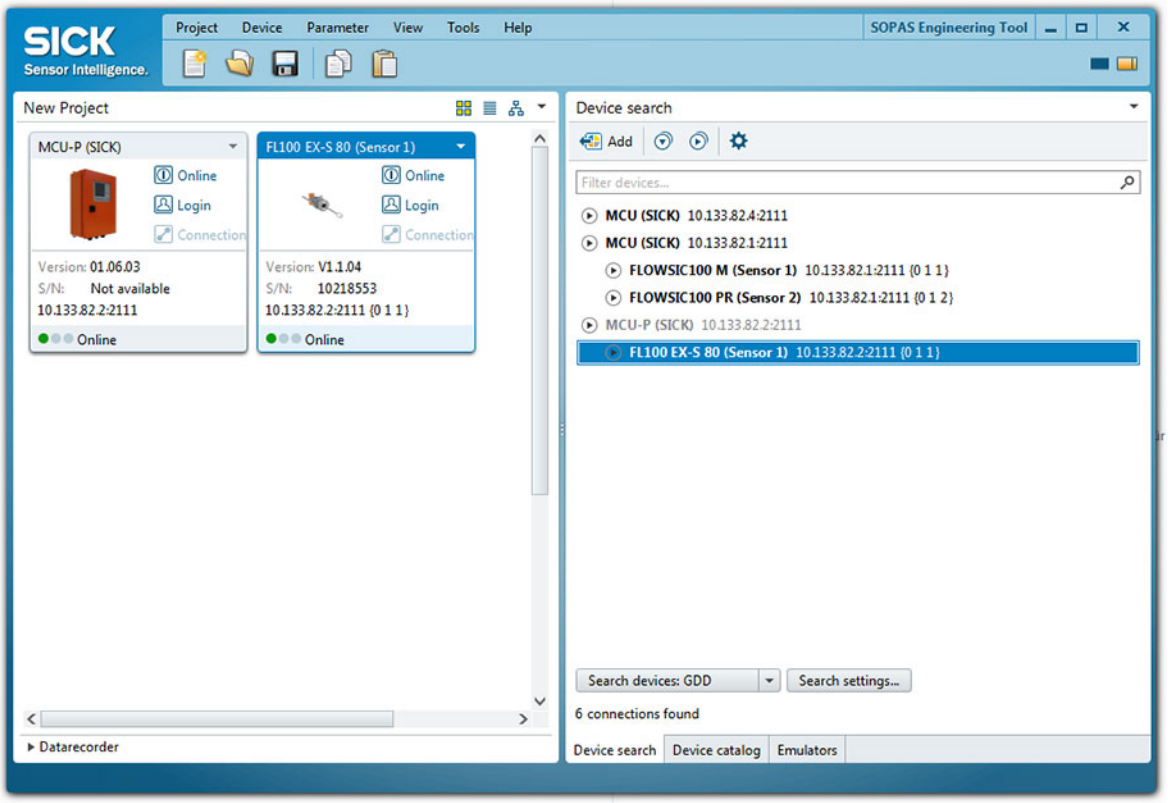


1 Device search
2 Project area
3 Device search progress
4 Device search abort
5 Device search result
6 Number of devices found

3.1 Device selection

► Move the required devices with drag-and-drop or a double-click on the required device into the project area.
  – The configuration of the devices is shown in a separate device window.
  – The device windows can be opened by a double-click on the respective device file or the context menu (→ pg. 14, Fig. 14).

Fig. 13 Device selection



3.2 Device context menu

Fig. 14 Device context menu

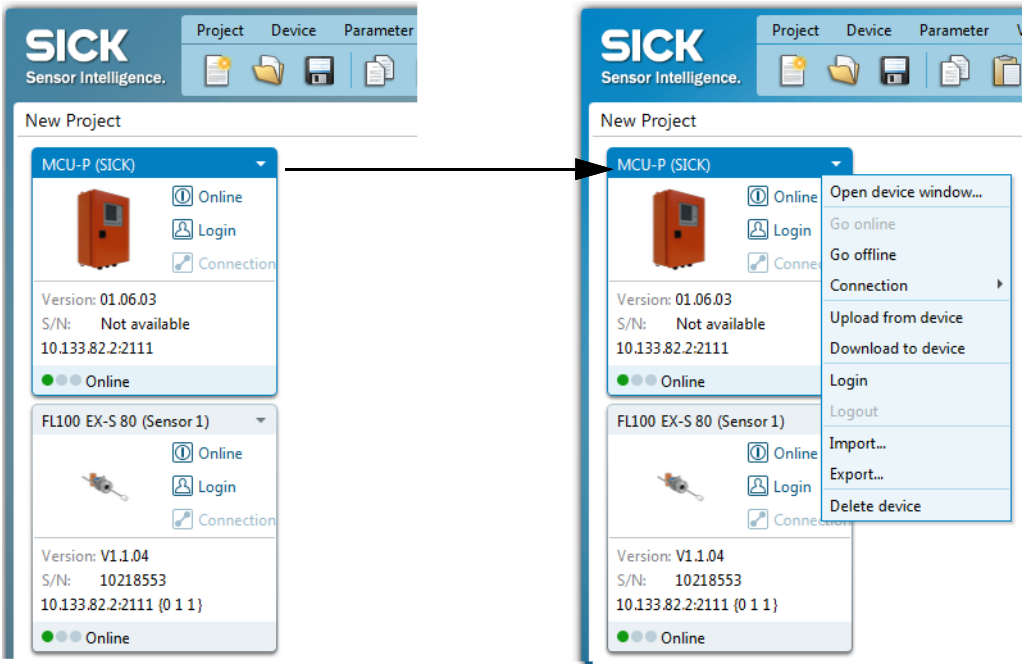


Tabelle 1 Contents of device context menu

Context menu	Description
Go online	Establishes the connection between SOPAS ET and the device.
Go offline	Interrupts the connection between SOPAS ET and the device.
Connection	– Select Connection: Changes the connection settings. – Deselect Connection: Deletes the connection settings.
Upload from device	Uploads all parameter values from the connected device and transfers them to SOPAS ET.
Download to device	Downloads the parameter values from SOPAS ET to the connected device. Only those parameter values are downloaded which can be written at the currently logged in user level.
Login	Opens the login dialog.
Logout	Logs out the user from the device.
Import	Imports a suitable device from the *.sopas file and overwrites the parameter values with the values saved in the *.sopas file. During import to an online device, the parameters are immediately written to the device. Only those parameter values are written which can be written at the currently logged in user level.
Export	Exports the device information and the associated project information and saves them in a *.sopas file.
Delete device	Deletes the device from the project.

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