



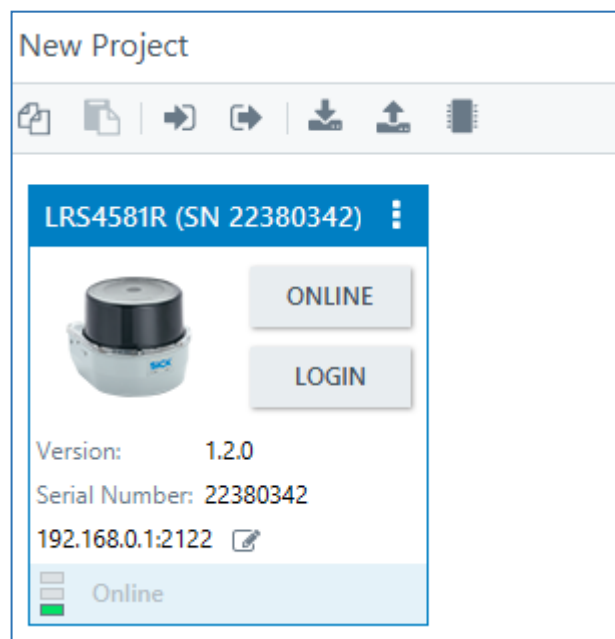
Configuration Export and Comparison

LRS4581R-230001 Firmware V1.20 / 10.08.2022

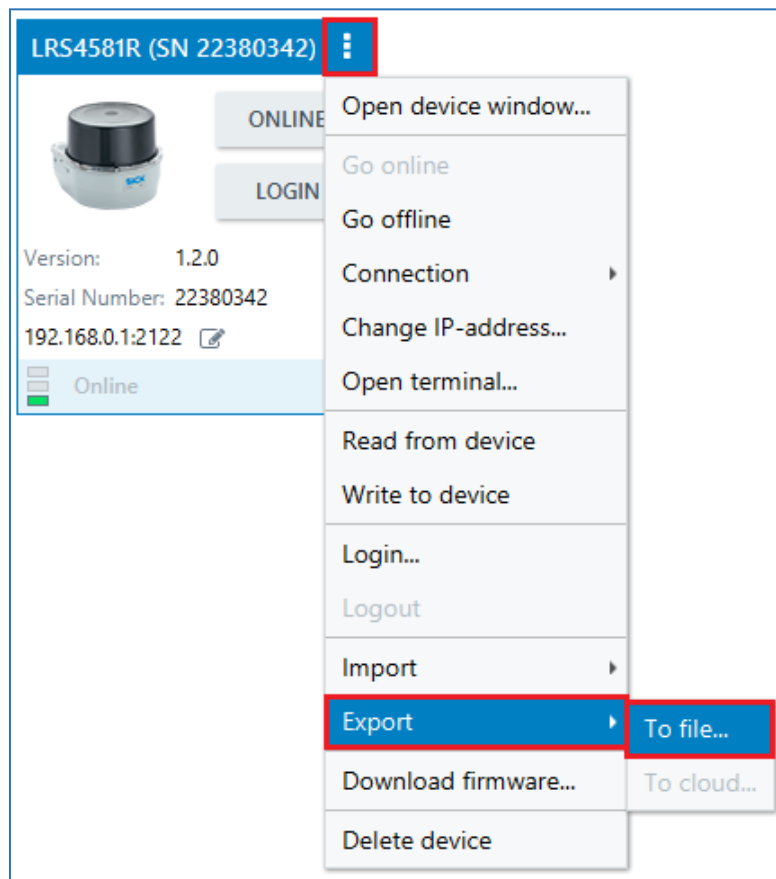
1. Export a Device Configuration

The active configuration of the LRS4xxx can be stored using SOPAS ET in version 2022.4 and later. If SOPAS ET is already installed, follow the next steps to store the active configuration of your device.

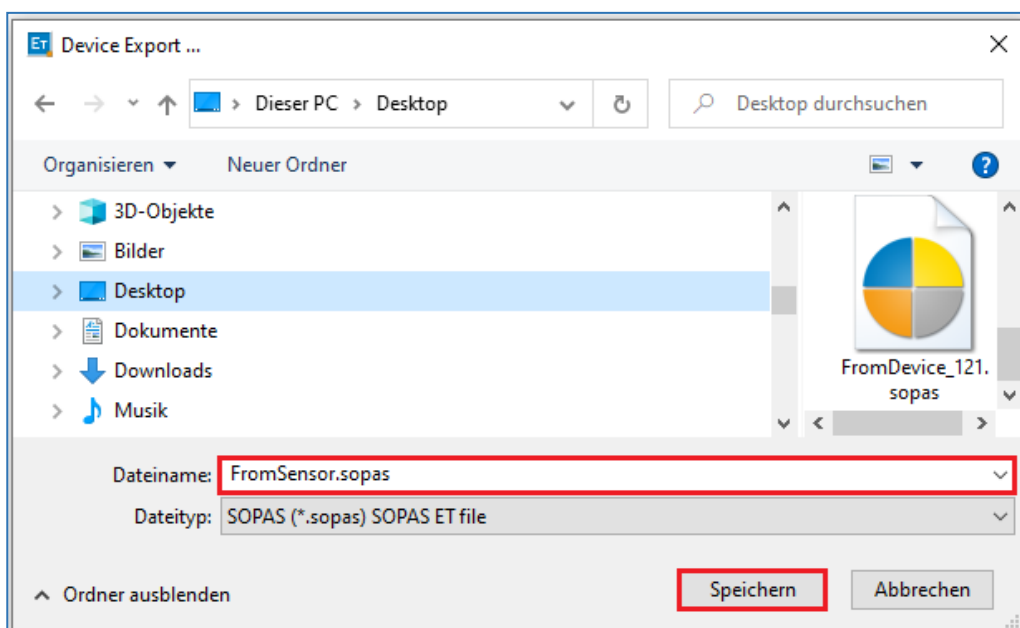
1. Establish an Ethernet connection between your PC and the sensor
2. Open SOPAS ET
3. After a short time, your device will appear in the device List



4. Open the device menu by pressing the three dots next to the sensor name and select 'Export' → 'To file...'



5. Add a configuration name in the appearing window and press 'Save' to create a '.sopas' file



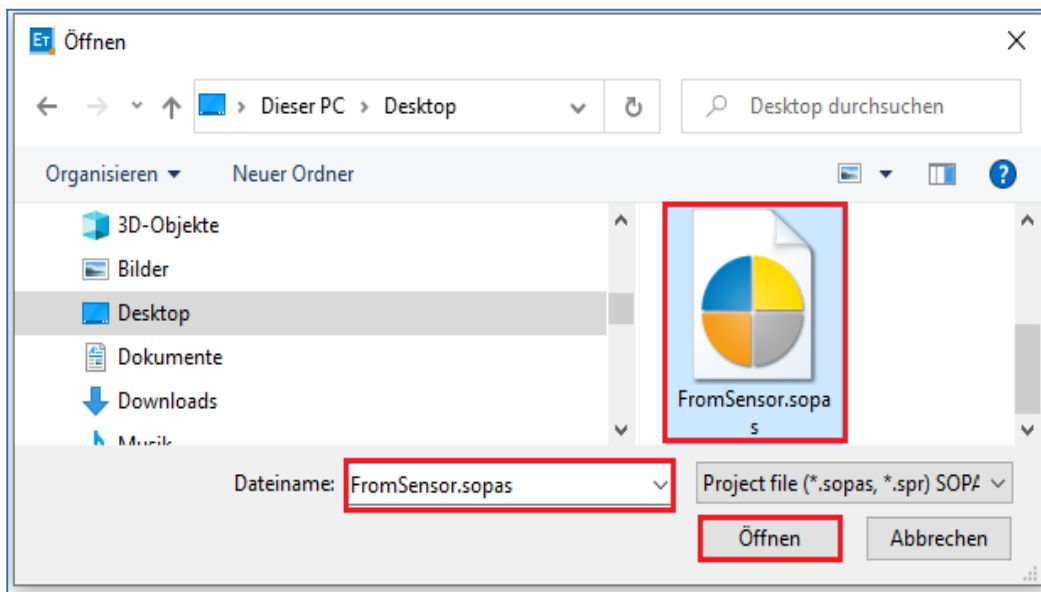
2. Compare or Display a Stored Device Configuration

The display of a previously stored device configuration is equal to a normal device comparison. Follow the next steps to display the stored device configurations in SOPAS ET.

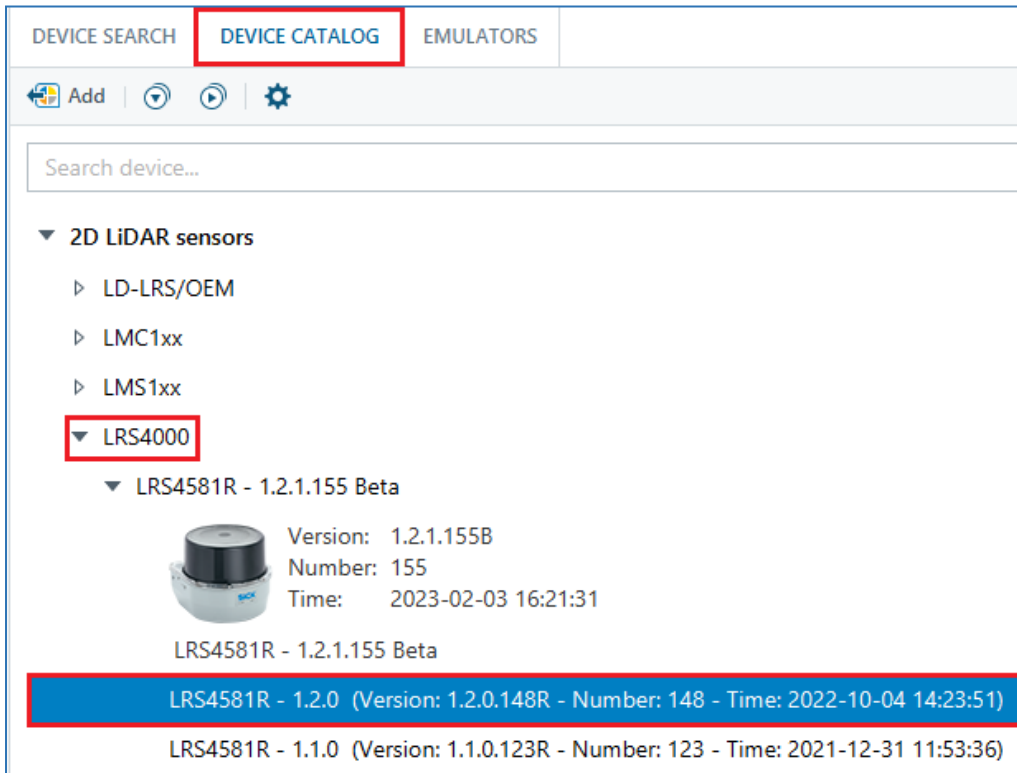
1. Open SOPAS ET
2. Press 'Open an existing project' in the top right corner of the program



3. Select the '.sopas' configuration of the device you want to display and press 'open'



4. In case you are connected to a device, a new window will ask you to Switch the device online. Select 'No' to forward the process
5. The device will appear in the device List
6. You can now add an unconfigured LRS4xxx with the same version from the 'DEVICE CATALOG' by double clicking to the desired version.



7. The second sensor will now appear next to the loaded configuration.
6. To compare both devices press 'F7' or select the three dots in the top right corner of the App and select 'Device → 'Compare devices...'
7. A new window appears, which shows the available devices on the right side
8. Drag both devices with your mouse to the left are of the new window
9. You can now see all configurations as a list in the left side of the new window

3. Comparison of Two Devices using SOPAS ET

After adding to devices to the SOPAS ET compare window as described in step 2., a window as shown below will appear. Note that one of the devices will only contain the default configuration from the device catalog in case your goal is to display an old configuration.

The screenshot shows the 'SOPAS Device Compare' application window. The title bar reads 'SOPAS Device Compare'. The main window title is 'SICK'. Below the title bar, the text reads 'Comparison of LRS4581R (SN 22380342) and LRS4581R (not defined)'. The interface is divided into several sections:

- Search Assistant (D):** A search bar labeled 'Search CID-Item...' with a magnifying glass icon. Below it are two checkboxes: 'Case sensitive' and 'Show differences only'.
- Parameter List (E):** A tree view of configuration parameters. Parameters are listed in a column on the left, and their values for the two devices are shown in columns to the right. Red text indicates differences, while black text indicates equal configuration. For example, 'EtherLinkState' is 'true' for the first device and 'false' for the second. 'EtherIPSpeedDuplexNegot...' shows 'TX_100MB_FULL' vs 'TX_UNKNOWN_DUPLEX_SPEED'.
- Devices Panel (B):** A panel on the right titled 'Devices' with an 'Add' button and a search bar 'Search device...'. It lists two devices:
 - Device 1: Name: LRS4581R (SN 22380342), Version: 1.2.0.148R, SerialN...: 22380342, Location: SN 22380342.
 - Device 2: Name: LRS4581R (not defined), Version: 1.2.0.148R, Location: not defined.
- Log:** A 'Log' section at the bottom left.

- A. Additional Settings
 - a. Export the comparison as '.xlsx': 'Device Compare' → 'Export...'
 - b. Collapse all settings: 'View' → 'Collapse all'
 - c. Expand all settings: 'View' → 'Expand all'
- B. Available devices for the comparison
- C. Selected devices including their specific configuration values
- D. Search assistant to find specific parameter
- E. List of parameters. A red text shows differences between both devices, whereas a black text show equal configuration

The most relevant parameters and their names are shown in the following table.

Name in SOPASair	Name in SOPAS ET
Glare detection filter	PrefilterVariables → FilterParam → FREchoFilter
Echo filter	CfgMM → Measurement → Glare Detection Sensitivity
Scan configuration frequency	GeneralCfgDisMeasure → MeasParam → ScanConfig → udiScanFreq
Scan configuration angular	GeneralCfgDisMeasure → MeasParam → ScanConfig → aRange → 0
Distance scale	GeneralCfgApp → ScanParamsLrs → ScanDataScaleFactor
UDP port	GeneralCfgEthernetBase → EthernetBase-> EtherUDP...
AUX port	GeneralCfgEthernetBase → EthernetBase-> EtherAux...
Host port	GeneralCfgEthernetBase → EthernetBase-> EtherHost...