

Safety Laser Scanner Visualization Software

Software for Integration

SICK
Sensor Intelligence.



Described product

Safety Laser Scanner Visualization Software

Manufacturer

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Original document

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1 About this document

1.1 Information on the operating instructions

To become familiar with the product and its functions, read the operating instructions carefully before starting any work.

The operating instructions are an integral part of the product. Keep the manual accessible to personnel at all times. If the product is passed on to third parties, the operating instructions must also be handed over.

1.2 Target groups of these operating instructions

This document is intended for persons who commission, install, operate and maintain the product.

1.3 Further Informations

The product page with further information can be found at the **SICK Product ID** under: pid.sick.com/{P/N}.

P/N corresponds to the part number of the product.

The following information is available depending on the product:

- Data sheets
- This document in all available language versions
- CAD data and dimensional drawings
- Certificates (e.g. declaration of conformity)
- More publications
- Software
- Accessories

1.4 Symbols and document conventions

Safety notes and other notes



DANGER

Indicates a situation presenting imminent danger, which will lead to death or serious injuries if not prevented.



WARNING

Indicates a situation presenting possible danger, which may lead to death or serious injuries if not prevented.



CAUTION

Indicates a situation presenting possible danger, which may lead to moderate or minor injuries if not prevented.



NOTICE

Indicates a situation presenting possible danger, which may lead to property damage if not prevented.



NOTE

Indicates useful tips and recommendations.

Instructions to action

- ▶ The arrow denotes instructions to action.
- 1. The sequence of instructions for action is numbered.
- 2. Follow the order in which the numbered instructions are given.
- ✓ The check mark denotes the result of an instruction.

2 Product description

2.1 Function

Safety laser scanner visualization is a software solution for visualizing and analyzing all diagnostic and device information from safety laser scanners integrated in the network in real time. The software can be integrated into existing infrastructures such as Windows-based SCADA systems (e.g. WinCC) or installed on Windows PCs.

Supported safety laser scanners

- All microScan3 that support one of the following protocols:
 - EFI-pro
 - PROFINET PROFI-safe
 - EtherCAT®
 - CIP Safety™ over EtherNet/IP™
- outdoorScan3 Pro – EtherNet/IP™

3 Installation

3.1 Setup network

Prerequisites

- The safety laser scanner and the HMI must be connected to the same network.
- The safety laser scanner and the HMI must be in the same sub-network.
- Consider the individual IT conditions to setup this network.

Approach

Prepare HMI

1. Start the HMI.
 2. Open the Task Manager. In WinCE you can use the shortcut **alt + tab**.
 3. Select the running HMI task.
 4. Click **End Task**.
- ✓ The runtime of the HMI is closed.

Check IP address range

1. Click **Start > Settings > Control Panel**.
2. Doubleclick **Network and Dial-up Connections**.
3. Check the tab **IP Address**. Make sure it is in the same IP range as the safety laser scanner.

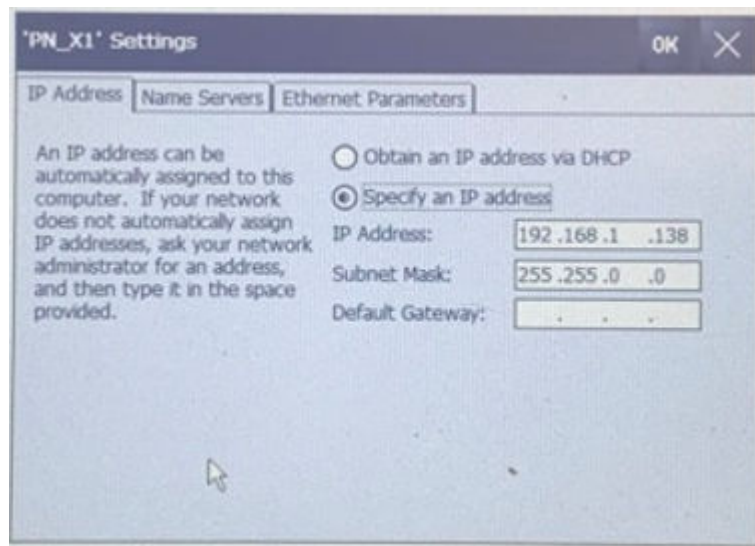


Figure 1: IP address settings

4. If it is necessary to change the IP address of the safety laser scanner, use the configuration software Safety Designer.
- ✓ HMI and safety laser scanner are in the same IP range.

Check connection

1. Click **Start > Run**.
2. Enter `cmd` and click **OK**.
3. Enter `Ping [IP-address of safety laser scanner]` and confirm with Enter.

Example:

```
Ping 192.168.1.3
```

- ✓ The output Reply from [IP-address of safety laser scanner] shows that communication between Panel and Scanner is established.

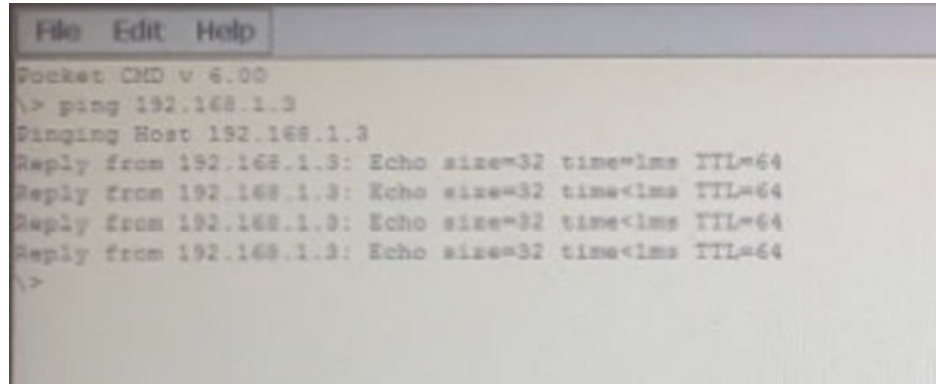


Figure 2: Positive ping result

3.2 Install software to HMI

Prerequisites

- HMI
- Portable storage medium for your HMI (e. g. Micro SD card or USB stick)
- Executable file for installation (e. g. SLS-V_WinCE8X86_v2.0.exe)
- Optional: batch file to run software, see "Run via batch file", page 9

Approach

1. Copy all required files to the portable storage medium.
 - Executable file
 - Optional: batch file
2. Connect the storage medium to your HMI. E. g. for a HMI using an internal storage card, insert the SD card into the card slot.



Figure 3: Example: SIEMENS Panel

4 Operation

4.1 Start the software

There are different ways to run the Visualization Software.

- Run exe file.
- Run via batch file.
- Run via custom created button.

4.1.1 Run Exe file

1. Click **Start > Run**.
2. Enter `explorer` and click **OK**.
3. Doubleclick on the storage location, that is used for the executable file.
4. Doubleclick the executable file, e. g. `SLS-V_Win32PC_v*.*.exe`.
- ✓ The software starts up.
5. Enter the IP adress of the safety laser scanner in the text field at top left of the window.

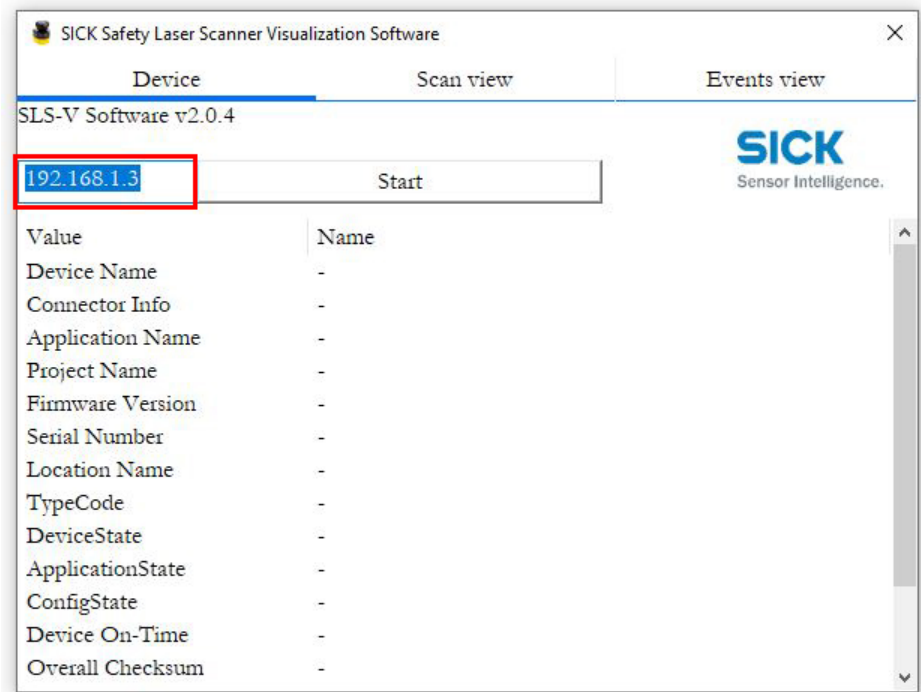


Figure 4: text field for IP adress

6. Click **start**.
- ✓ The software connects to the safety laser scanner. After a few seconds, the protective fields and the surrounding contour are displayed.

4.1.2 Run via batch file

Overview

Using the batch file, you can start the software with parameters (arguments). This allows for example the software to start connected directly to a specific safety laser scanner with a given IP adress.

On WinCE there is no tool to edit the batchfile to your needs. You have to edit the batch file on your PC and then transfer it to the HMI.

Approach

1. Consider, whether the batch file will be stored to the same folder, as the executable file for the software. If not, you need to change the name of the executable file to include the complete path (See examples below).
2. Edit the batch file on your PC.

Table 1: Parameters

Argument	Description
/IP=???	Software will use this IP address for the safety laser scanner.
/Run	Software will connect directly after startup.
/topmost	Software will stay in the foreground.

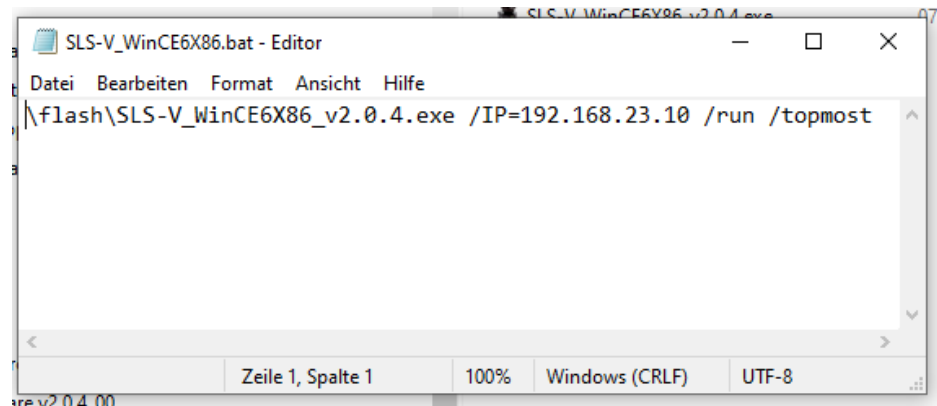


Figure 5: Example batch file

3. Transfer the the batch file to the HMI.
4. Run the batch file to start the software.

Example

- SLS-V_WinCE6X86_v2.0.4.exe /IP=192.168.0.1
After launch, the given IP address is already entered in the Software. It will not connect to the safety laser scanner.
- \\flash\SLS-V_WinCE6X86_v2.0.4.exe /IP=192.168.0.1
Batch file not in the same folder as the executable file. After launch, the given IP address is already entered in the Software. It will not connect to the safety laser scanner.
- SLS-V_WinCE6X86_v2.0.4.exe /IP=192.168.0.1 /run
Software will start with the given IP address. It will connect to safety laser scanner after start.
- SLS-V_WinCE6X86_v2.0.4.exe /IP=192.168.0.1 /run /topmost
Software will start with the given IP address. It will connect to safety laser scanner after start. It will stay in the foreground.

4.1.3 Run via custom created button

Overview

Using a WinCC command, you can start the software with arguments. This way you can add a button to a WinCC page to start the software.

Approach (example for Win CC)

1. Create a button to start the software.
2. Configure the button release event: **Events > Release > Other functions > StartProgramm > Program name: Safety_Laser_Scanner_Visualization.exe**

3. Configure **program parameters** according to your needs. Configuration of IP adress is necessary for the button to work.

Table 2: Parameters

Argument	Description
/IP=???	Software will use this IP address for the safety laser scanner.
/Run	Software will connect directly after startup.
/topmost	Software will stay in the foreground.

- ✓ The configuration of the button is complete



Figure 6: Example configuration of button release event.

Complementary information

If you have multiple safety laser scanners, you need multiple buttons. This is necessary, as every safety laser scanner has its own IP-adress.

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