

Software Manual

R60727.0002 - Index 1b



OS10 Standard

Operator software for Kübler devices

Product features:

- For PCs and notebooks with Windows 8.1 or higher
- Easy parametrization, configuration and monitoring
- Additional editor tool for parameter file management

Version:	Description:
R60727.0002	OS6.0 Standard_ 01b/cn/May2017 Add-on: File Editor
R60727.0002 – Index 1	Software: OS6.0v1.6.x.x
R60727.0002 – Index 2b, 03/2020	Software: OS6.0v1.7.14.x
R60727.0002 – Index 1a, 02/2021	Software : OS10
R60727.0002 – Index 1b, 04/2022	OS10 Installation - Activation Code

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German is the original version

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1 General

This software manual describes handling and operation of the **OS10** operator surface.



Important:

The activation code: >52094< is required for installation and update.

Appropriate Use

The **OS10** operator software described here is suitable for connection, parameterization, operation and simulation of Kübler units as well as certified safety devices of the Safety-M compact series.

All compatible device types will be immediately detected after connecting to a PC with a launched OS10 software and provided with the appropriate working environment and all available windows and components.

This software manual describes all operating elements of the Kübler (standard-) devices. The description of the operating elements for the certified safety devices of the Safety-M compact series can be found in the Manual OS10 Safety.



Please note: The illustrations, screenshots and several text passages in this software manual are defined as **572**, but also applying to the other Kübler that could be used with the previous version OS6.

The installation and uninstallation of this program and its components are described in the OS10 Installer Manual.



Warning: OS10 can only be installed and used on a PC with Microsoft® Windows 8.1 and higher versions.

Os10.0 User-Directory

A separate document directory is generated for each user using OS10.0.

This Os10.0 User-Directory is always created under the path

„C:\Users\<Name>\Documents\Os100“ where <Name> is the login name of the User.

2 OS10 Components

2.1 Standard Mode

The following figure shows an already started OS10 with state „Searching unit...“:

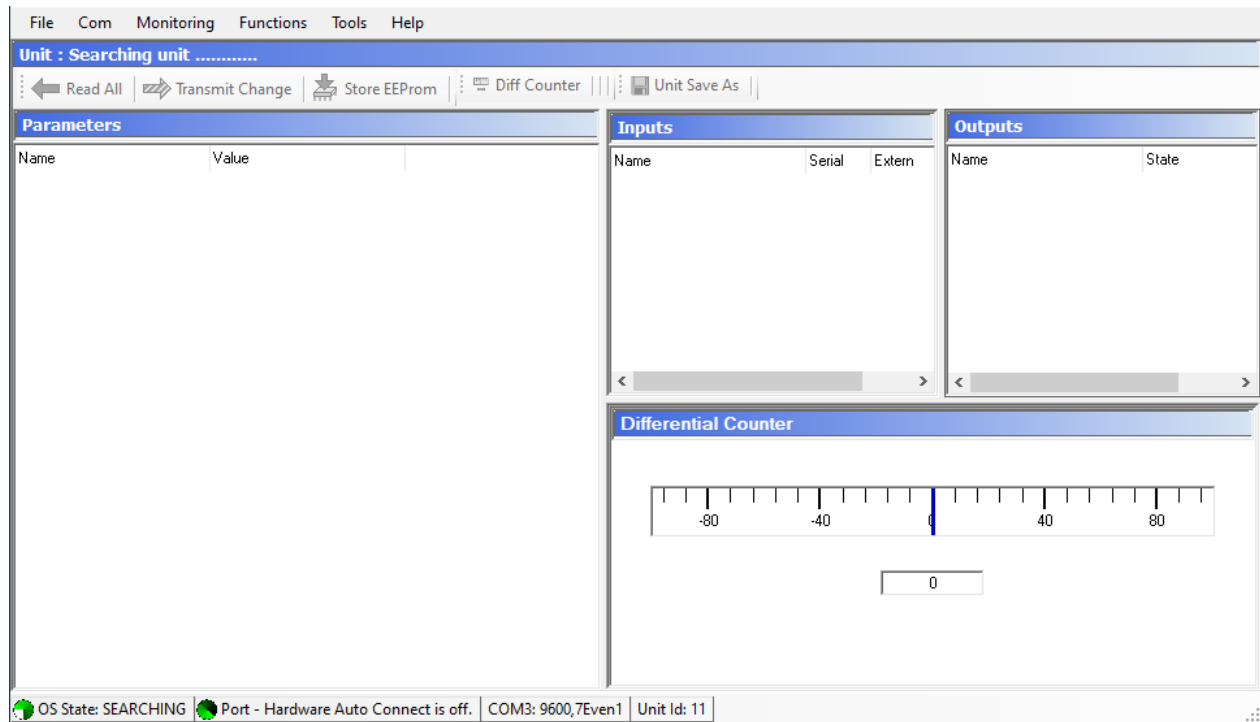


Figure 2-1 Overview „OS10 standard“

The OS10 Software detects automatically all compatible devices and switchover to the special working environment. This manual describes the operating elements for all Kübler (standard-) devices.

2.2 The OS10 windows

The OS10 compatible devices can be parametrized via OS10 windows. The OS10 window consists of the following components (see figure 2-2).

1. list of parameters
2. list of inputs
3. list of outputs
4. simple monitor

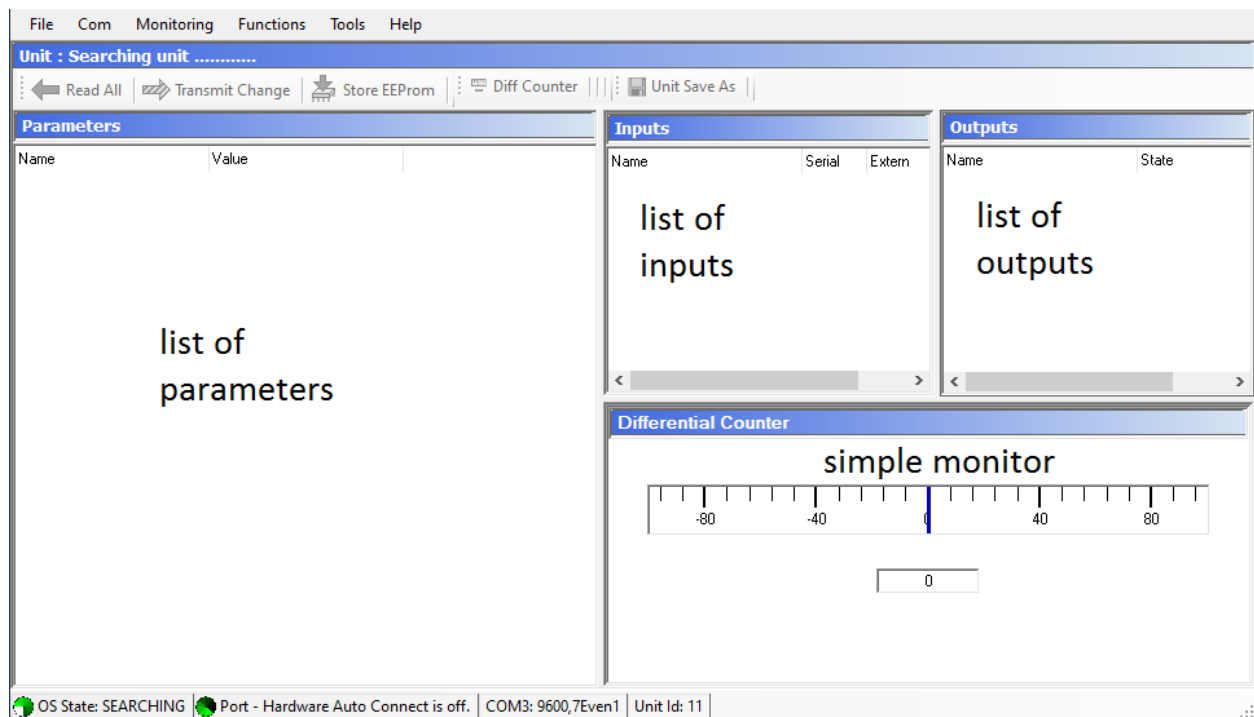


Figure 2-2 Overview OS10 window

A navigation menu and a toolbar with buttons allows an easy and intuitive operation. Unavailable features are greyed out automatically.

2.3 Parameter

2.3.1 Parameter list

All parameters of a connected device (for example 572) are displayed in the parameter list.

The parameters can be directly edited in this list.

By right-clicking a parameter, a pop-up menu will open and the parameter will be read-out individually. The “figure 2-3” shows the parameter “Preselection 2” for example.

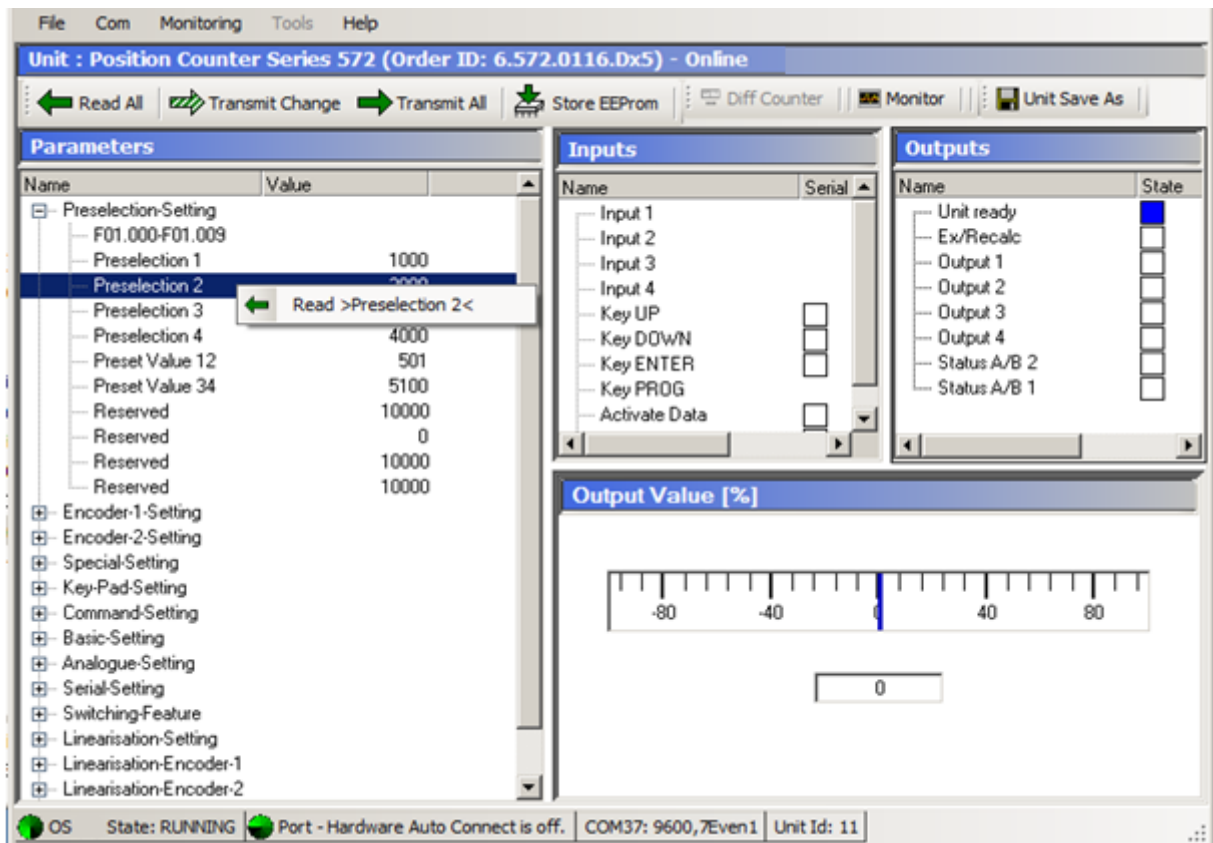
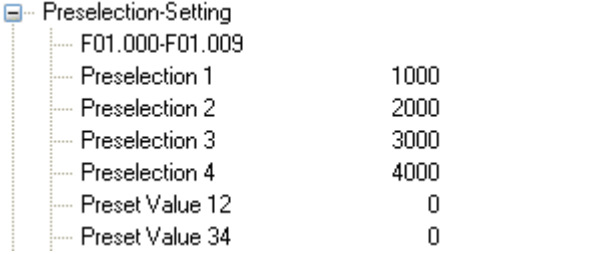
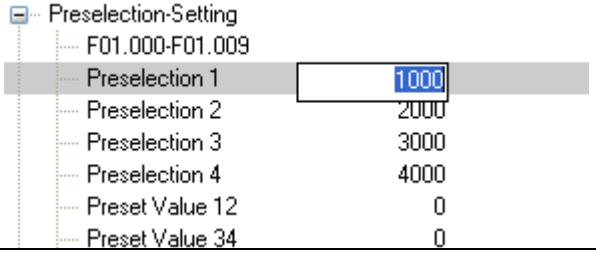
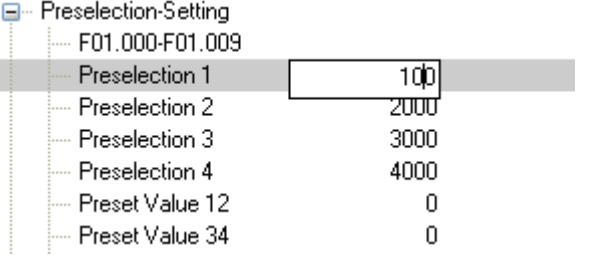
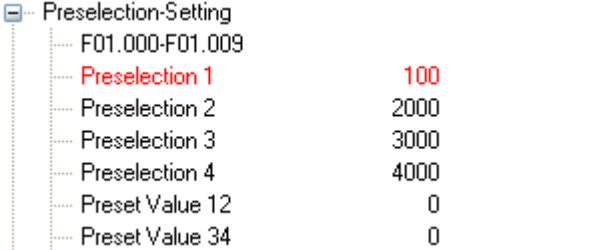


Figure 2-3 Parameter list - 572

2.3.2 Edit parameter values


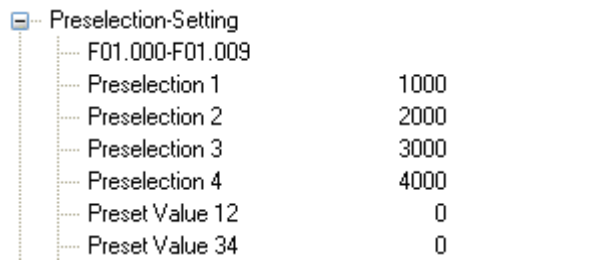
The following example for the parameter **Preselection 1** shows how to edit, read and transmit single parameter values.

<p>Double-click the parameter value...</p>	 <pre> Preselection-Setting ├── F01.000-F01.009 │ ├── Preselection 1 1000 │ ├── Preselection 2 2000 │ ├── Preselection 3 3000 │ ├── Preselection 4 4000 │ ├── Preset Value 12 0 │ └── Preset Value 34 0 </pre>
<p>... an editing window opens:</p>	 <pre> Preselection-Setting ├── F01.000-F01.009 │ ├── Preselection 1 1000 │ ├── Preselection 2 2000 │ ├── Preselection 3 3000 │ ├── Preselection 4 4000 │ ├── Preset Value 12 0 │ └── Preset Value 34 0 </pre>
<p>Now the value can be changed (e. g.100).</p>	 <pre> Preselection-Setting ├── F01.000-F01.009 │ ├── Preselection 1 100 │ ├── Preselection 2 2000 │ ├── Preselection 3 3000 │ ├── Preselection 4 4000 │ ├── Preset Value 12 0 │ └── Preset Value 34 0 </pre>
<p>Clicking Enter, the changed value is accepted and marked in red, <u>but not</u> transmitted to the unit.</p>	 <pre> Preselection-Setting ├── F01.000-F01.009 │ ├── Preselection 1 100 │ ├── Preselection 2 2000 │ ├── Preselection 3 3000 │ ├── Preselection 4 4000 │ ├── Preset Value 12 0 │ └── Preset Value 34 0 </pre>



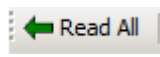
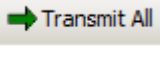
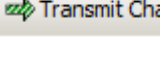
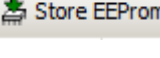
Please note the exceptions for parameters in the appendix chapter.

2.3.3 Read Single Parameters

<p>By using the pop-up menu Read a single parameter can be read from the connected unit.</p> <div data-bbox="167 414 542 470" style="border: 1px solid gray; padding: 2px; margin: 10px 0;">  </div> <p>After reading, the parameter is automatically marked black.</p>	 <pre> Preselection-Setting ├── F01.000-F01.009 │ ├── Preselection 1 1000 │ ├── Preselection 2 2000 │ ├── Preselection 3 3000 │ └── Preselection 4 4000 ├── Preset Value 12 0 └── Preset Value 34 0 </pre>
---	--

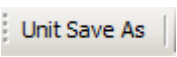
2.3.4 Functions of several parameters

For simultaneous reading and transmission of several parameters, the following functions are available:


Button	Description
	All parameters* of the connected unit will be read and all current parameters will be overwritten in the parameter list. All parameters will be marked black .
	All parameters* will be transmitted to the unit and marked orange . Then the transmitted parameters will be activated automatically by the OS10. After activation, all parameters are automatically read back and compared internally. If they match, the respective parameters are automatically marked green .
	Only the changed (red marked) parameters are transmitted to the unit. Apart from this, the actions Transmit Changed and Transmit All are identical.
	Save all parameters to the EEPROM. This type of storage has no influence on the parameter colors in the parameter list.

*) „All parameters" refer to the parameter data sets which are "free switched" in the file editor (see also chapter 4 Editor tool).

2.3.5 Save Parameters as a File

Button	Description
	Clicking the button Unit Save as , the file editor is displayed on the left side of the screen and the actual parameter data set can be saved in a file.

2.3.6 Device-dependent special parameters



The display of additional special parameters is device-dependent.

For some devices additional special parameters are displayed.

The figure below shows these special parameters as examples for a 571T (the meaning of these parameters can be found in the corresponding device manual).

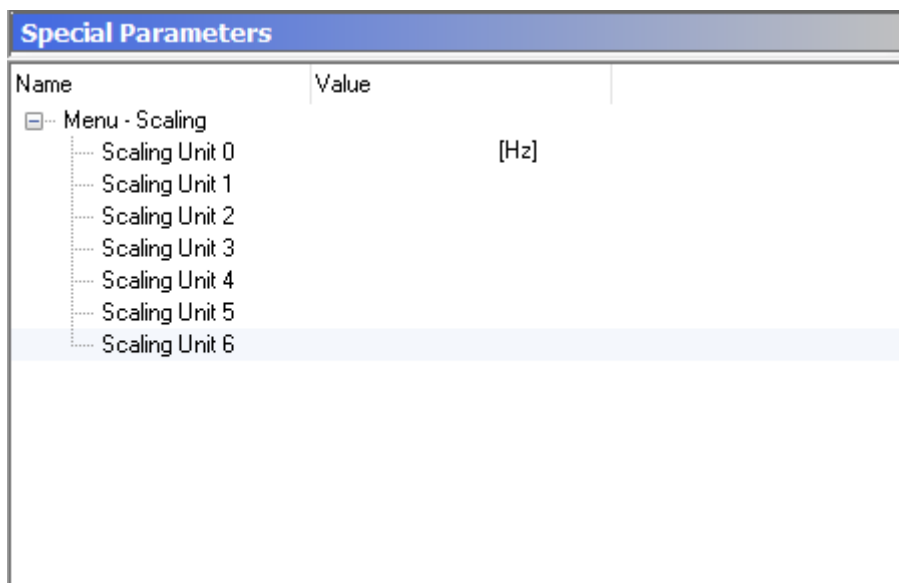


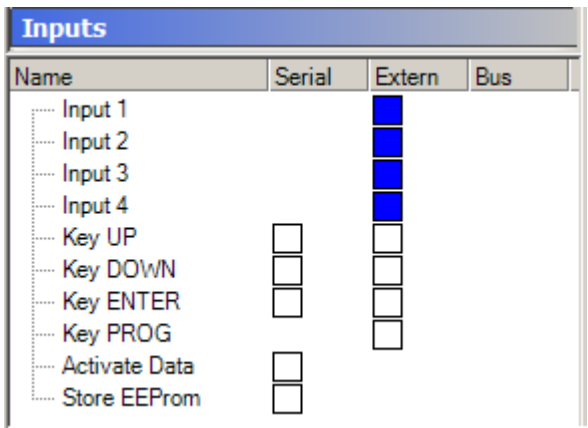
Figure 2-4 Additional special parameters - example 571T

The change of the parameter values is analogous to the method described above (see chapter [Edit parameter values](#)). The input format is set to a text with a maximum length of 16 characters. Any surplus characters on the right are truncated.

2.4 Inputs

Depending on the connected device type, three types of inputs are differentiated. A description of the inputs is found in the corresponding user manual.

Input type	Description
Serial	The serial inputs are activated / deactivated with a double-click to the status icon using the OS10.
Extern	Extern inputs can be activated / deactivated only on the device itself.
Bus	Extern inputs are activated / deactivated with CAN Bus (not available for all devices).



The screenshot shows a window titled 'Inputs' with a table of input configurations. The table has columns for 'Name', 'Serial', 'Extern', and 'Bus'. The 'Serial' column contains checkboxes for 'Key UP', 'Key DOWN', 'Key ENTER', 'Key PROG', 'Activate Data', and 'Store EEPROM'. The 'Extern' column contains blue squares for 'Input 1', 'Input 2', 'Input 3', and 'Input 4', and white squares for 'Key UP', 'Key DOWN', 'Key ENTER', 'Key PROG', 'Activate Data', and 'Store EEPROM'. The 'Bus' column is empty.

Status Icon

Input is inactiv

Input is activ

Figure 2-5 Input list (e. g. 572)

2.5 Outputs

This list shows the different output types (e.g. hardware outputs and status messages).

The outputs depend on the connected device and cannot be changed by the OS10.

Outputs	
Name	State
Unit ready	<input checked="" type="checkbox"/>
Ex/Recalc	<input type="checkbox"/>
Output 1	<input type="checkbox"/>
Output 2	<input type="checkbox"/>
Output 3	<input type="checkbox"/>
Output 4	<input type="checkbox"/>
Status A/B 2	<input type="checkbox"/>
Status A/B 1	<input type="checkbox"/>

Status Icon	Description
<input type="checkbox"/>	Output is inactiv
<input checked="" type="checkbox"/>	Output is activ

Figure 2-6 Output list (e. g. 572)

2.6 Monitor

The standard mode offers two different variants of monitors with which a device can be monitored.

2.6.1 Difference Counter

This type of monitor provides special readings that may vary depending on the device type. This monitor windows display special measured values in different ways, depending on the connected device type (see screenshot):

The figure shows four different monitor window types:

- Output Value [%]:** A linear scale from -80 to 80 with a blue needle pointing to 0.
- Differential Counter:** A color-coded scale from -40 to 40 with a blue needle pointing to 0. The scale transitions from red (-40) to yellow (-20), green (0), yellow (20), and red (40).
- Display Value:** A linear scale from -40 to 40 with a blue needle pointing to 0.
- Input Value:** A linear scale from -40 to 40 with a blue needle pointing to 0.

In the user manual you can find which window is relevant for the connected device.

2.6.2 Monitor

The monitor provides an easy way to monitor the state of a Kübler device. Depending on the requirements, one or more parameters can be monitored and stored as a so-called "log" in a file.

For each device the monitor loads adapted data or variable sets. The meaning of the monitor variables can be found in the corresponding device manual.

The description of the monitor and its functionality is shown using the example of the signal converter SK.1D-1A2RS. But it is transferable for every Kübler device.

Overview

The monitor is organized into four sections or modes (see figure below).

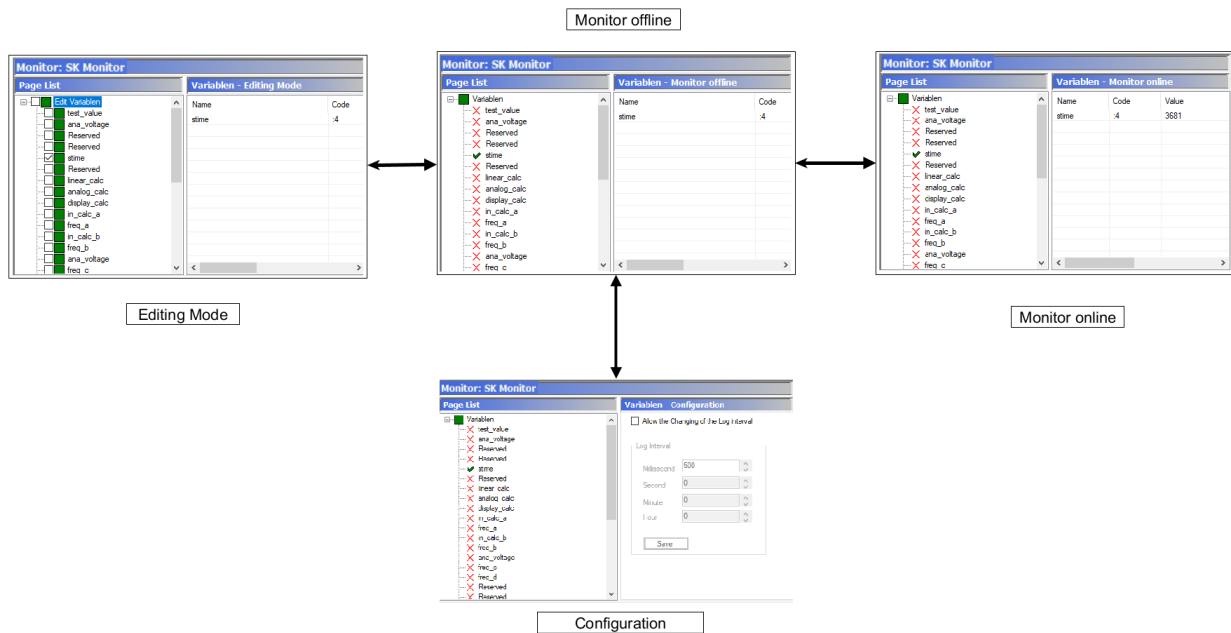


Figure 2-7 Monitor – Overview

The function of the individual sections/modes is summarized in the following table.

Name	Function
Monitor Offline	<u>Display mode:</u> Display all available or selected variables.
Monitor Online	<u>Monitor mode:</u> Cyclic readout and display of the selected variables.
Editing Mode	<u>Editor mode:</u> Selection of one or several monitor variables for the monitoring mode.
Configuration	<u>Configuration mode:</u> This mode is for setting monitor-specific configurations.

Table 2-1 Overview/Monitor

General Handling

The monitor is very easy to use either by a pop-up menu or the control buttons (see figure below).

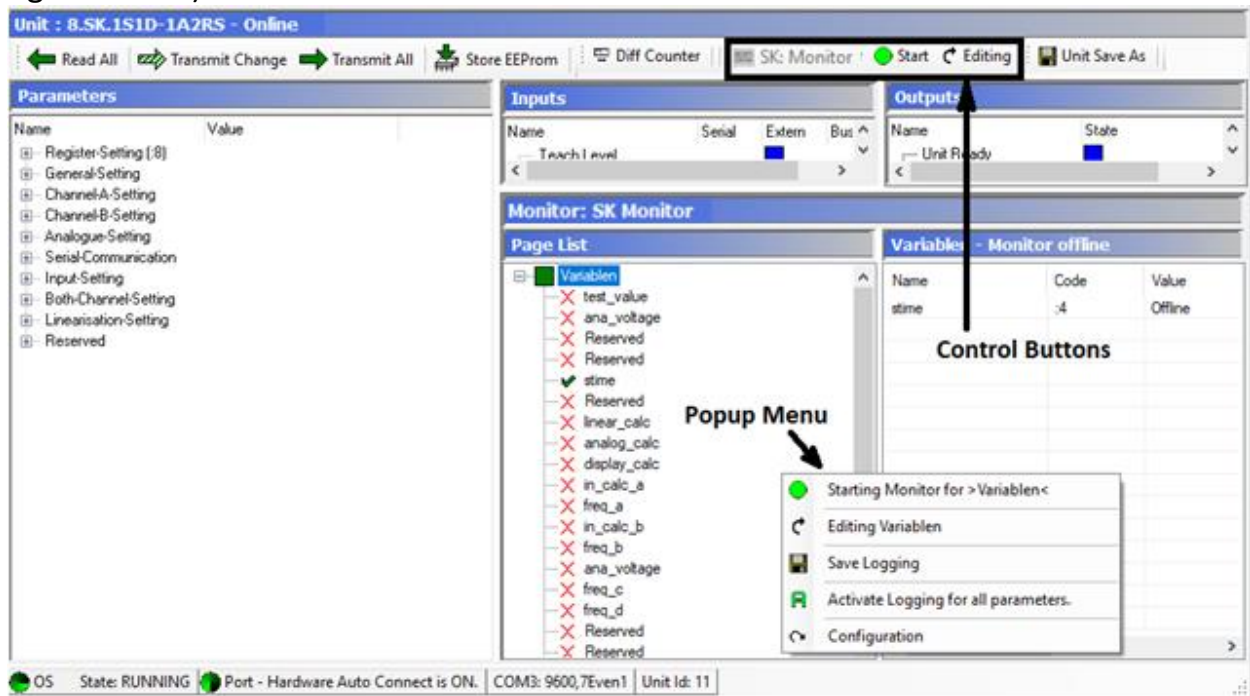


Figure 2-8 Monitor / Pop-up-Menu and Control-Buttons (e.g. signal converter SK.1D-1A2RS)

Depending on the modes used, different popup menu and control buttons are available where the pop-up menu is the main control of the monitor. It opens with a mouse-right-click on the page list (see also figure above).

Unusable controls are automatically greyed out (example: control button **SK: Monitor** in the picture above).

Display-Mode: Monitor Offline

Monitor Offline is a pure display or overview mode and shows the selected set of variables.

After starting of the monitor this mode is shown automatically.

The monitor is separated in two sections: **Page List** (left) and **Monitor Panel** (right).

Page List (left)

All variables to be monitored by the monitor are marked by the icon ✓. These variables are also shown in the monitor panel (right). All other are marked by the icon ✗.

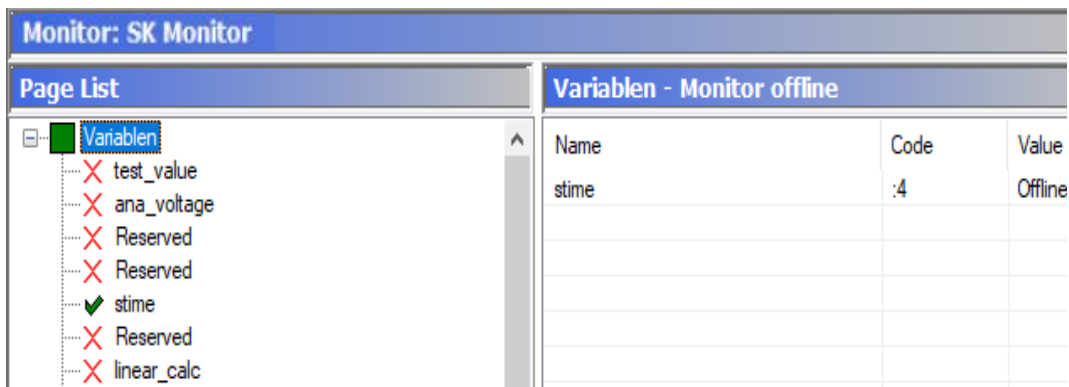


Figure 2-9 Monitor – Page List / Monitor Offline

Monitor panel (right)

In the **monitor panel**(right) all variables to be monitored are shown. In the figure above, it is the variable "stime".

The monitor panel is separated into four columns:

Column	Meaning
Name	Name of the variable
Code	Code of the variable
Value	To identify the monitor offline status, "Offline" is always shown.
Display Format	Not relevant for this mode

Table 2-2 Monitor panel/Columns

Menus and controls

For the display mode the following menus/controls can be used (figure below).



Figure 2-10 Monitor – Monitor Offline / Popup-Menu (and) and Control-Buttons (right)

Popup-Menu	Control-Button	Note
Starting Monitor for >Variablen<	Start	Switching to the Monitor-Mode
Editing Variablen	Editing	Switching to the Editor-Mode
Save Logging		Saving of the Logging *)
Activate Logging for stime		Activate of the Logging for stime *)
Configuration	-	Switching to the Configuration-Mode *)

Table 2-3 Monitor Offline /Controls

*) The use is explained as part of the logging.

Monitor-Mode: Monitor Online

This mode is the actual monitor or monitoring mode.

Page List (left)

The page list displays all the available variables.

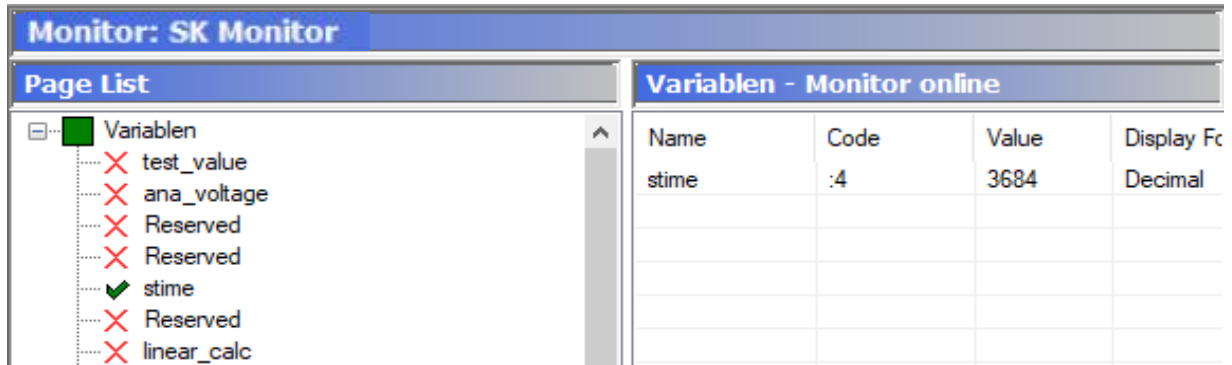


Figure 2-11 Monitor – Monitor / Monitor Online

Monitor panel (right)

All variables shown in this list are read out cyclically by the device and the values are output in the **Value** column. The figure above shows e.g. the variable „stime“.

For each shown variable, the display format can be specified individually (see table below).

Column	Note								
Name	Name of the variable								
Code	Code of the variable								
Value	Actual readout value variable								
Display Format	<p>Actual display format in the Mode „<i>Monitor Online</i>“.</p> <p>Available display formats:</p> <table border="1"> <thead> <tr> <th>Name of format</th> <th>Note</th> </tr> </thead> <tbody> <tr> <td>Decimal</td> <td>Normal, decimal display</td> </tr> <tr> <td>Hex</td> <td>8-stellige, hexadecimal display</td> </tr> <tr> <td>Binary</td> <td>32-stellige, binary display</td> </tr> </tbody> </table> <p>The format can be changed by clicking on the respective variable line.</p>	Name of format	Note	Decimal	Normal, decimal display	Hex	8-stellige, hexadecimal display	Binary	32-stellige, binary display
Name of format	Note								
Decimal	Normal, decimal display								
Hex	8-stellige, hexadecimal display								
Binary	32-stellige, binary display								

Table 2-4 Monitor panel

Monitoring: cyclic reading of parameters

The monitor works in so-called cycles. The monitor panel (right) is cyclical process from top to bottom, whereby exactly one variable is recorded per cycle.

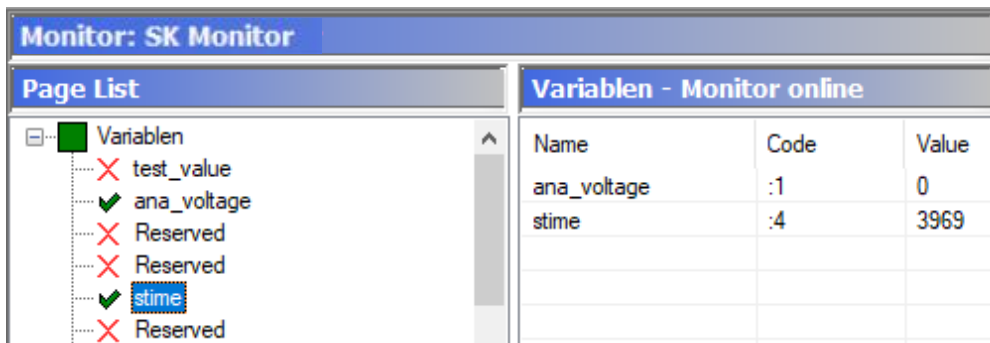


Figure 2-12 Monitor – Monitor / Monitor Online - example

For the example above this means:

1. Cycle: ana_voltage
2. Cycle: stime
3. Cycle: ana_voltage
4. Cycle: stime
5. Cycle: etc..

Menu and controls

The following controls are available for this mode:



Figure 2-13 Monitor Online – Popup-Menu (left) and Control-Buttons (right)

The table below explains the task of the individual controls. Unusable controls are not listed.



Popup-Menu	Control-Button	Note
 Stopping Monitor for >Variablen<	 Stop	Switching to the Display-Mode

Table 2-5 Monitor Online / controls

Editor-Mode: Editing Mode

This mode is using for the (un)selection of variables to be monitored.

Page List (left)

In the page list the desired variables are selected. Selected variables are indicated by an activated checkbox in front of the name of the variable. These variables are also shown in the monitor panel (right). Unselected variables are indicated by a deactivated checkbox (see figure below).

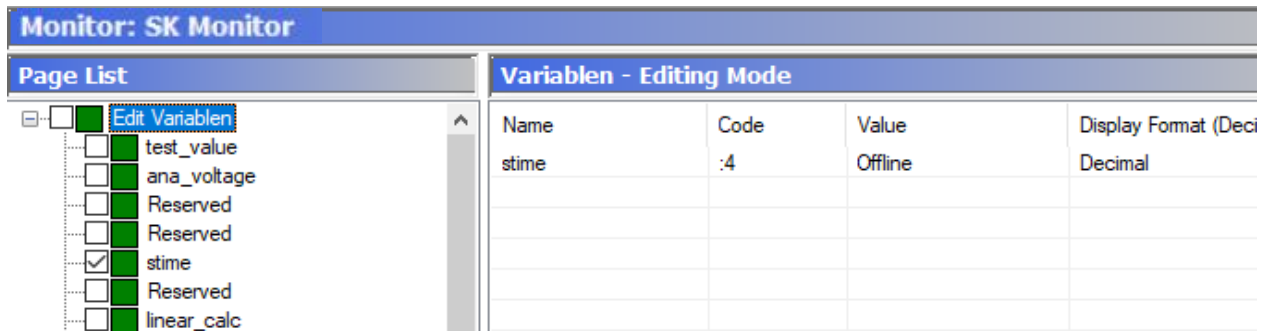


Figure 2-14 Editing Mode / Page list

The variable selection or deselection is done by simply clicking the checkbox in front of the respective variable name. The monitor panel is updated automatically.

Monitor panel (right)

In this mode the monitor panel only shows the selected parameters.

Column	Note
Name	Name of the variable
Code	Code of the variable
Value	To identify the editing mode status, "Offline" is always shown.
Display Format	Not relevant for this mode

Table 2-6 Editor Mode / Monitor panel

Menu and controls

The following controls are available for this mode:



Figure 2-15 Editor Mode / Popup-Menu (left) and Control-Buttons (right)

The table below explains the task of the individual controls. Unusable controls are not listed.

Popup-Menu	Control-Button	Note
Closing the editing of >Variablen<	Close	Switching to the Display-Mode
Save and close editor	Save and close	Switching to the Display-Mode Additionally, this selection is saved in a device-dependent configuration file and is available for later use.
Save Logging	-	Saving of the Logging *)
Activate Logging for all parameters.	-	Activate the Logging for all variables*)

Table 2-7 Editor Mode / Controls

*) The use is explained as part of the logging.

Data-Logging

For each selected variable an individual data log can be created. The most important properties are listed in the following table.

Data-Log property	Note
Individual data log	Each variable has his own data log.
Deleting the entries	When the monitor is started (change to monitor mode), all logs are ALWAYS cleared automatically.
maximum size	A data log consists of a maximum of 10000 entries. When the number of entries of 10000 is reached in a data log, then no new entry is taken over.
Save and evaluate	Each data log can be saved in a file. The stored data can be prepared and evaluated with a suitable program.

Table 2-8 Data Logging / Properties of a log

Restriction for logging: time resolution

The time resolution of logging is limited for two reasons.

Limitations by	Limitation
data transfer	A serial data transfer takes time. Unfavourable configuration settings can significantly degrade the time resolution.
OS10	The monitor has to share the serial port with the other components. The OS10 also serves other components besides the monitor, such as the Inputs (see p. 11), the Outputs (see p.12) or the programming of parameters (see p.7). All these components communicate with the connected Kübler device via the same serial interface.



The time interval between two log entries is at least ~330-375 msec.

Also, the specification of a minimum log distance described below are subject to the above restriction. For the sake of simplicity, the logging is explained using an example and requires the following steps:

1. Selection of Variables
2. Execution of the logging
3. Saving and evaluation
4. Special settings

1. Selection of Variables

The selection of the parameters is made optionally in display or editor mode. Because the selection procedure is identical in both modes, it is only shown in display mode. The example used here implies that the desired parameters have been previously selected in editor mode.

The initial situation is outlined in the figure below.

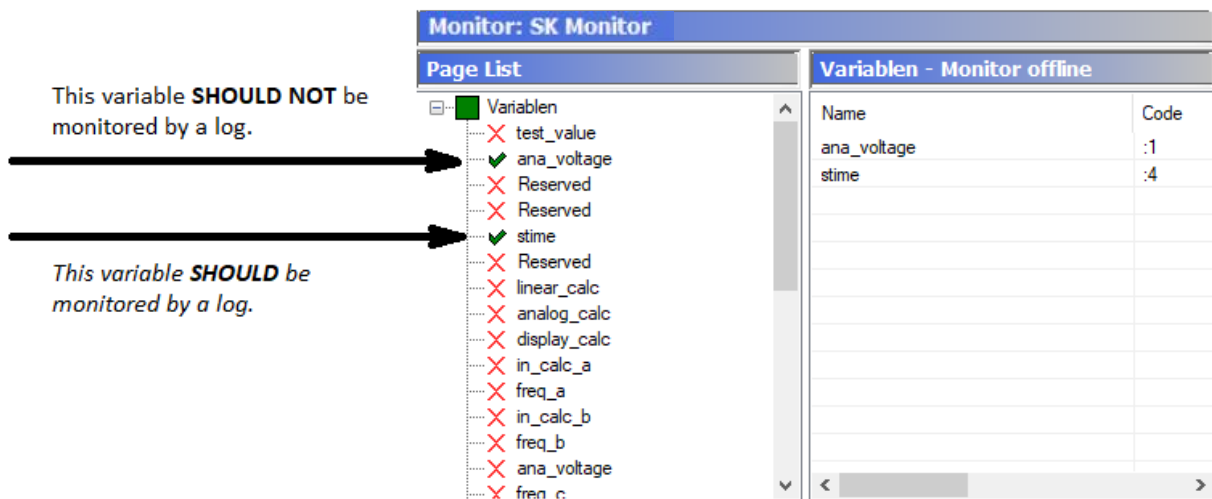


Figure 2-16 Logging - selection of parameters: initial situation

Activate the "stime" variable (e.g. with a mouse click).

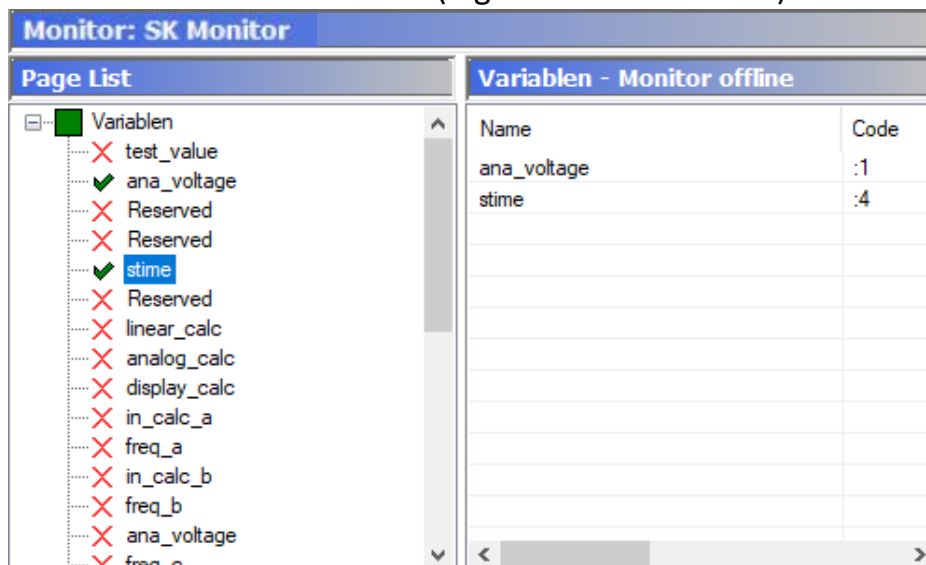



Figure 2-17 Logging - choice of parameter: selection of parameters

Open the pop-up menu. Make sure that the desired variable is shown in the corresponding menu (see also figure below). Activate logging by clicking on the menu  Activate Logging for stime .

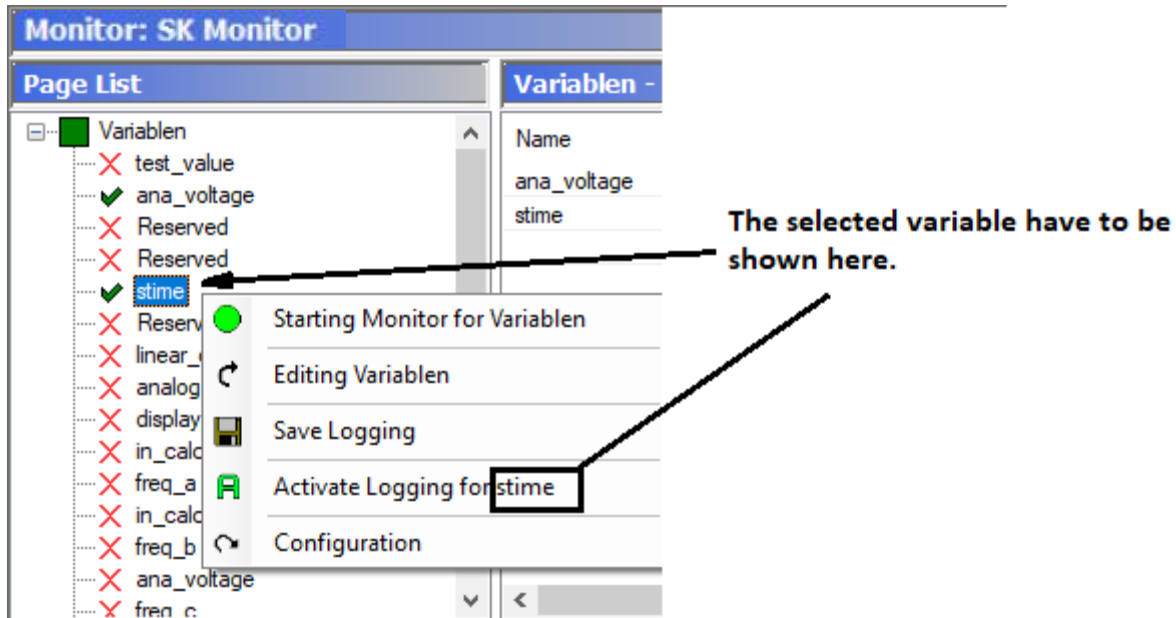


Figure 2-18 Logging - choice of parameter: selection of variables - before activation

The activated variable is automatically displayed in *italics and underlined* both in the page list and in the monitor field (see figure below).

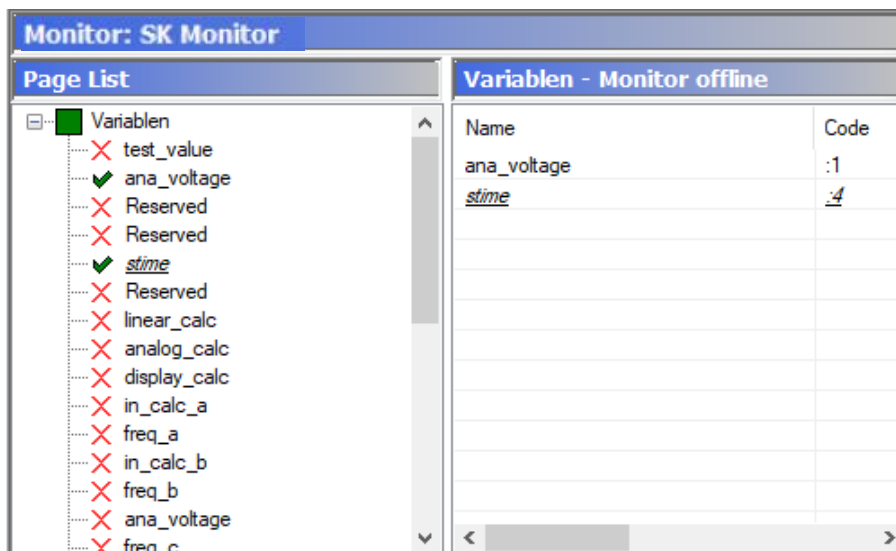



Figure 2-19 Logging - choice of parameter: selection of variables – after activation

The deactivation of this single variable is done on the same way using the menu  DeActivate Logging for stime and will therefore not be explained further here. Of course, other variable or all variables can be activated or deactivated in the same way.

2. Execution of the logging

Start the monitor by switching to monitoring mode (see figure below).

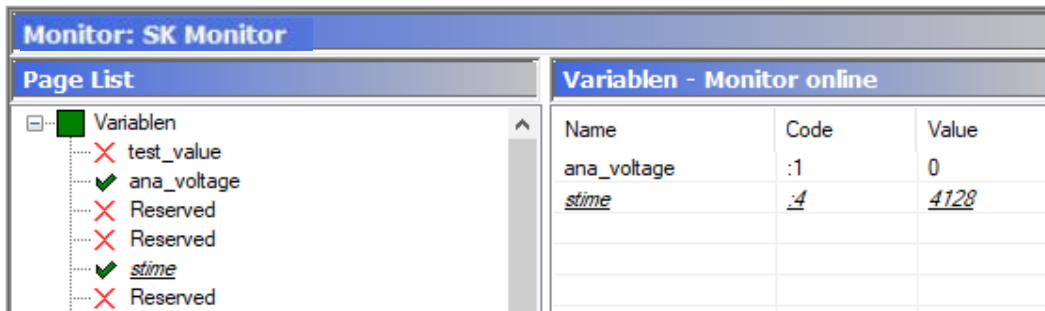


Figure 2-20 Logging - Execution

The logging runs automatically and ends either by ending the monitoring mode (switching to the display mode) or by reaching the maximum number of 10000 entries.

3. Saving and evaluation

The saving of the data can be done in display or editor mode. Because the selection process is identical in both modes, it is only shown in display mode.

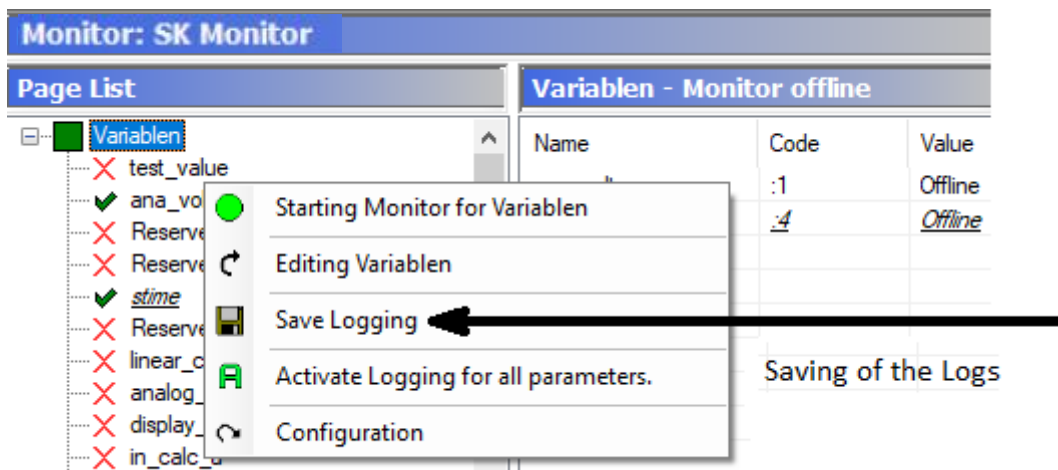


Figure 2-21 Logging – Saving of the Logs

The recorded logs are saved using the menu  Save Logging .

Location of the Logs

Every Log is saved in a sub directory („\Os100\Monitoring“) of the OS10 directory. This directory is not changeable (see figure below).

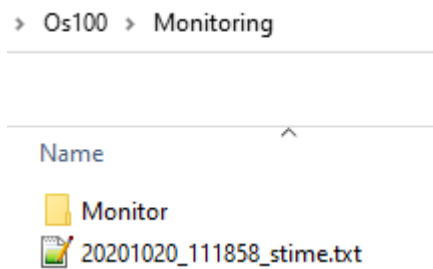


Figure 2-22 Logging – Location of the Logs

Name of a log file

The name of a log file is generated automatically and follows the following schemas:

< date of saving >_<time of saving>_<name of variable >.txt .

The date of saving is written "backwards" (YearMonthDay). The time of saving has the form "HourMinuteSecond".

Structure of a Logs

The Log is structured as a simple text file (see table below).

example of a Logs	Note
#;Name;Code;LogTime;Value	<- head line
0;stime;"4";+2-2019.09.19-13:24:41.900;+3973	<- entry 0 (start entry)
1;stime;"4";+2-2019.09.19-13:24:42.588;+3684	<- entry 1
2;stime;"4";+2-2019.09.19-13:24:43.306;+3972	<- entry 2
3;stime;"4";+2-2019.09.19-13:24:44.056;+3973	<- etc.
...	...
9999;stime;"4";+2-2019.09.19-15:21:22.798;+4127	<- entry 9999 (Max. possible entry)

Table 2-9 Data Logging / example of a log

The first line of a Log is always a head line following by the start entry (entry 0). After this follows the other log entries. A log has a maximum of 10000 entries.

Structure of a Log entry

The entry is divided into five parts delimited by a semicolon (;) and has the following structure:

<Number>;<Name>;<Variable Code>;<Time Stamp >;< Value >

#	Part	Note
1	Number	Current number of the entry; value range [0;9999]
2	Name	Name of the entry
3	Variable Code	Code of the selected variable This part is always enclosed in quotation marks and has the following structure: " < Variable Code >" Reason: As a code, values such as "; 4" or "; 9" are permissible. The quotes therefore identify the code.
4	time stamp	Time at which the entry was created. Structure of a time stamp: z-yyyy.MM.dd-hh.mm.ss.fff with z (time zone) yyyy (Year), MM (Month), dd (Day), hh (Hour 24), mm (Minute), ss (Second), fff (Millisecond)
5	Value	logged value of the select variable

Table 2-10 Data Logging / structure of a log entry


4. Special settings

Via the configuration mode a log interval (minimum log distance) between two log entries can be specified.



As a result of the boundary condition given under "**Restriction for logging**", only a minimum log distance can be specified. An exact specification of this distance is not possible.

Switching to the configuration mode

Via the pop-up menu  **Configuration** the display mode can be switched to the configuration mode (see figure below).

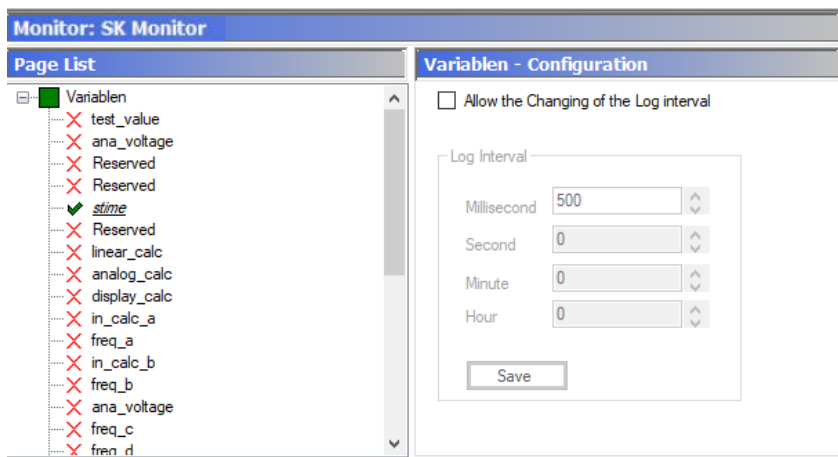


Figure 2-23 Logging – configuration mode: List of variables (left) and field of configuration (right)

Field of configuration (right)

The field of configuration is protected against unintentional changes. To make changes, the field Allow the Changing of the Log interval have to be activated (see figure below).

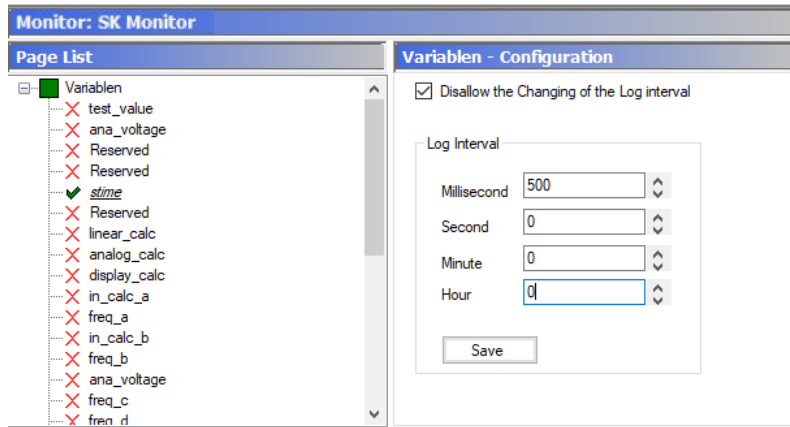


Figure 2-24 Logging – configuration mode: changing/input of a logging interval

The input of the log interval (minimum log distance) is done by the setting boxes listed below.

Setting box	Note
Millisecond <input type="text" value="500"/>	Setting of the milliseconds; Range [0,999]
Second <input type="text" value="0"/>	Setting of the seconds; Range [0,59]
Minute <input type="text" value="0"/>	Setting of the minutes; Range [0,59]
Hour <input type="text" value="0"/>	Setting of the hours; Range [0,23]

Table 2-11 Data Logging – configuration mode: setting boxes



Regardless of the setting made here, the time interval between two log entries given under "**Restriction for logging**" can NOT be underrun.

Menu and controls

The following controls are available for this mode:



Figure 2-25 Logging – configuration mode: Popup-Menu (left) and Control-Buttons (right)

The table below explains the task of the individual controls. Unusable controls are not listed.

Popup-Menu	Control-Button	Note
↶ Close Configuration		Takeover of the log interval and switch to the display mode.
	Save	Saving of the log interval in a config file.

Table 2-12 Data Logging – Controls

2.7 Exception: Lost Connection

In case of an interrupted connection between the OS10 safety and the device, the following message appears:

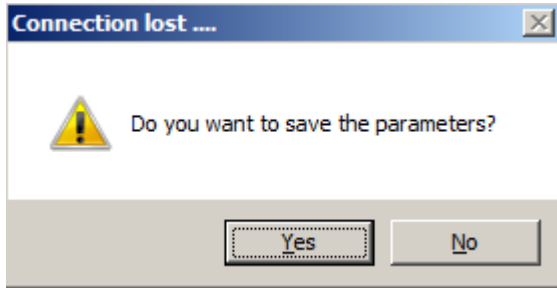


Figure 2-26 Lost Connection Warning

Two options are then available to the user:



Button	Action
click Yes :	All data can be saved by using the File Editor tool. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  This is the last chance to save the data! </div>
click No :	The data will not be saved.

Table 2-9 Options in Case of a Lost Connection

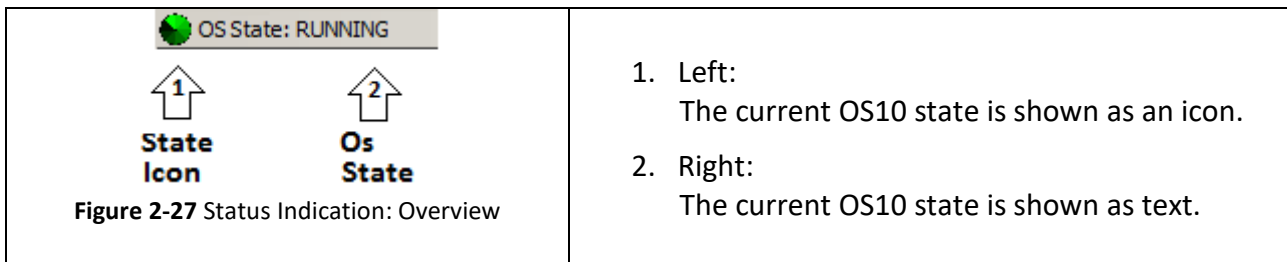
Regardless of the selection above, all data will be deleted from the OS10.



The OS10 surface cannot differentiate between a lost connection and a broken COM port. Therefore, both states are treated equally.

2.8 Status Indication

The OS10 state is shown in the status bar (see figure).



The OS10 has five different operating states (OFFLINE, REINIT, SEARCHING, CONNECTING and RUNNING). The table below describes these states.

Status	Tool Tip Text	Meaning
OS State: OFFLINE	"No com port. Please check your com port setting ...";	The OS10 is not connected to a serial interface or the interface is closed.
OS State: REINIT	"Re-initialization of the control.";	The OS10 reinitializes its individual components.
OS State: SEARCHING	"No unit is connecting. Searching unit ... ";	The OS10 opens the selected serial interface. Then the OS10 searches a device via interface.
OS State: CONNECTING	"Unit found. Download unit information ... ";	The OS10 has found a device and downloads the device data.
OS State: RUNNING	"Unit is connected. System is still working ... ";	The device data download is complete. The OS10 is in the normal operating mode.

Table 2-10 Status Indication OS10

3 Serial Configuration

The configuration tool of the serial interface is accessed via the **Show com port settings** menu or by using the keyboard shortcut Ctrl + K (see fig. below).

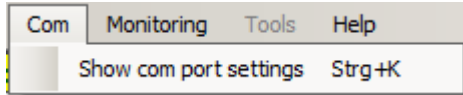


Figure 3-1 Serial Configuration: Start Menu

Depending on the connected device (Safety-M compact, standard unit 572, any compatible device or no device), the configuration tool appears in different background-designs:

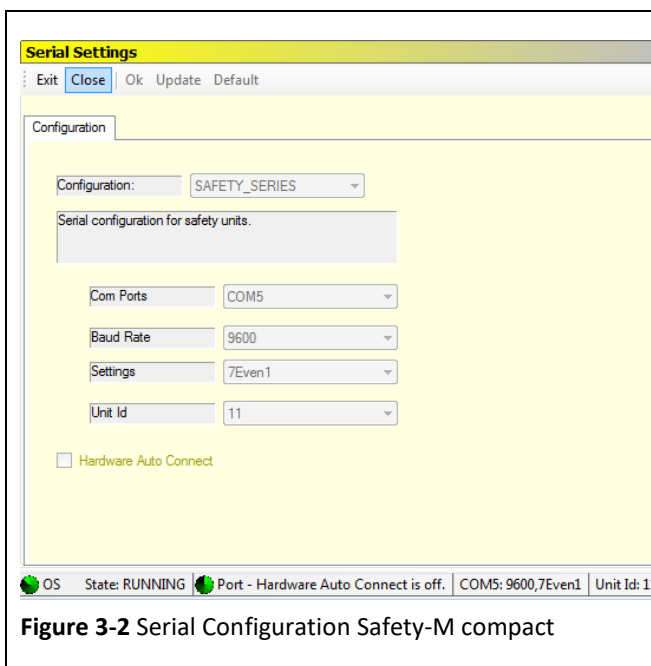


Figure 3-2 Serial Configuration Safety-M compact

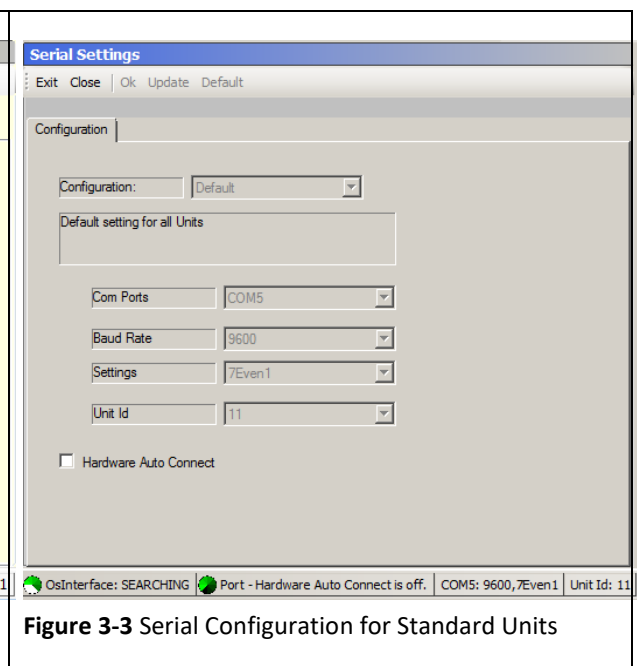


Figure 3-3 Serial Configuration for Standard Units

This manual describes only the serial configuration for all (standard-) devices.

3.1 Overview

Structure of the configuration tool:

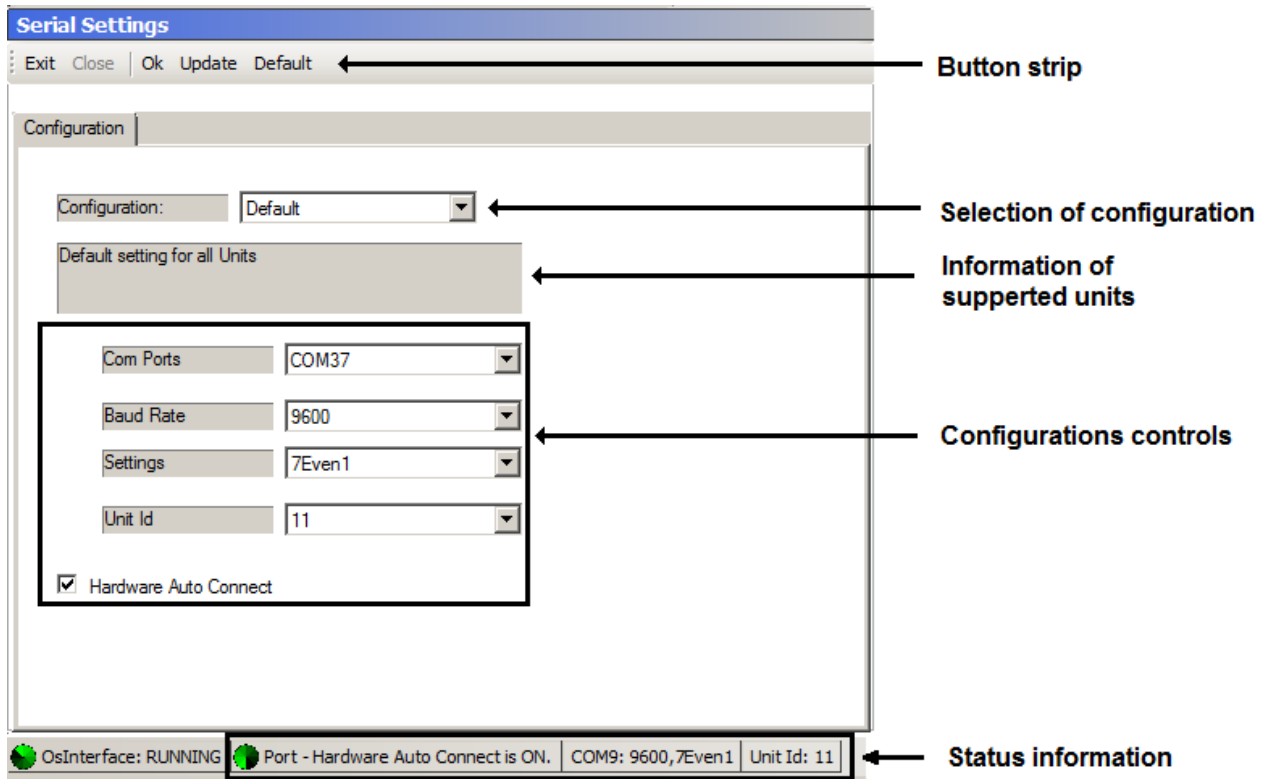


Figure 3-4 Serial Configuration Overview

For general operation a button bar or a control menu is available:

Com	Monitoring	Tools	Help
	Exit com port settings		Ctrl+K
	Close com port		Ctrl+O
	Ok		Ctrl+Shift+O
	Update com port list		Ctrl+Shift+U
	Set default values		Ctrl+Shift+D

Figure 3-5 Serial Configuration Tool

The configuration selection allows to change between different settings. The supported devices are displayed in the information box below the configuration-selection.

The four items **Com Ports**, **Baud Rate**, **Settings** and **UnitId** are used to select resp. set the COM-Port or unit number.

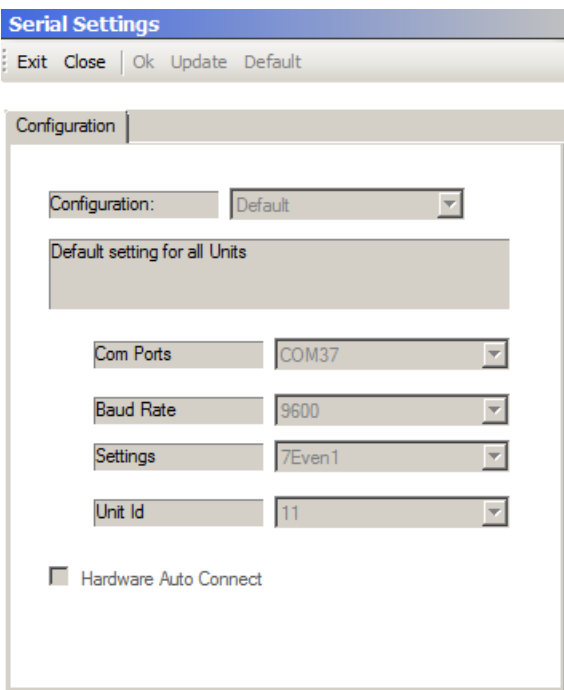
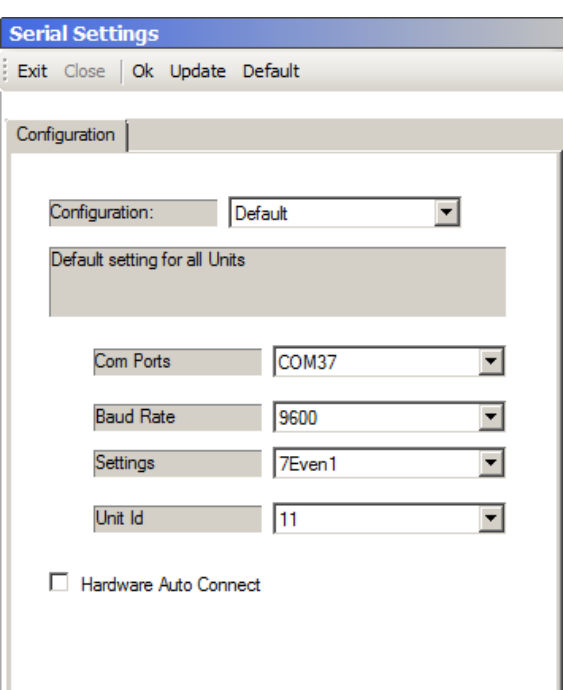
3.2 General Operating Elements

The basic control elements to exit the configuration window and for opening or closing the COM ports are shown below:

Button	Menu	Notice
Exit	Exit com port settings Ctrl+K	Exit the configuration window without changes in the settings
Close	Close com port Ctrl+O	Close the current COM port with Activation of “Ok”, “Update” and “Default”.

Table 3-1 Serial Configuration: General Operating Elements

Depending on whether the COM port is open or closed, one of the two variants listed below is shown:

 <p>Figure 3-6 Serial Configuration: COM-Port is <u>open</u></p> <p>Changes in the settings are disabled.</p>	 <p>Figure 3-7 Serial Configuration: COM-Port is <u>closed</u></p> <p>Changes in the settings are enabled.</p>
---	---



With a connected unit, closing of the COM port will always abort the connection. A warning “Connection lost...” appears.

If the COM port is closed additional features are available:

Buttons	Menu	Notice
Ok	Ok Ctrl+Shift+O	Transfers the edited COM port settings and closes the configuration window automatically. After closing, the OS10 immediately tries to connect a device.
Update	Update com port list Ctrl+Shift+U	Actualizes the COM port list. In case of a new available COM port at the PC, the list can be actualized by clicking the “Update” button.
Default	Set default values Ctrl+Shift+D	Resets baud rate, settings and unit number back to the factory settings.

Table 3-2 Serial Configuration: Operating Elements

3.3 Configuration Selection

Two configurations are available:

#	Name	Device	Baud Rate	Settings
1	Default	standard device	9600, 4800, 2400, 1200, 600, 19200, 38400	7Even1, 7Even2, 7Odd1, 7Odd2, 7None1, 7None2, 8Even1,8Odd1, 8None1, 8None2
2	SAFETY_SERIES	Safety-M compact	9600, 4800, 2400, 1200, 600, 19200, 38400, 56000, 57200, 76800, 115200	7Even1, 7Even2, 7Odd1, 7Odd2, 7None1, 7None2, 8Even1,8Odd1, 8None1, 8None2

Table 3-3 Serial Configuration: Configuration Selection

If a device is detected at the serial port, the corresponding configuration is selected automatically and entered into the corresponding operating elements.



Notice: The Safety-M compact unit has an extended baud rate range.

3.4 Operating Elements

The serial COM port selection as well as required settings is made by the control elements **Com Ports**, **Baud Rate** and **Settings**. Additionally the **Unit Id** item allows to assign a unit number to the connected device. The **Hardware Auto Connect** checkbox allows an automatic detection of “serial to USB” converters. More about this special feature see below.

Overview of all control elements:

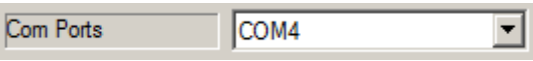

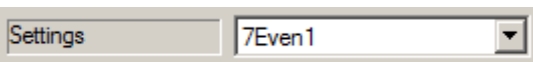
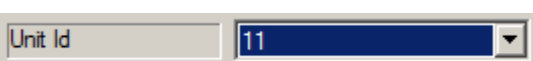
Konfiguration Tools	Notice
	List of all connected (and activated). COM Ports (COM1, COM4, etc.)
	List of all adjustable baud rates. Default setting: 9600
	List of all usable serial adjustments. Default setting: 7Even1
	List of all available unit numbers. Default setting: 11
<input checked="" type="checkbox"/> Hardware Auto Connect	Auto detection of „serial to USB“ converters. Default setting: not active

Table 3-4 Serial Configuration: Operating Elements / Configuration Tools

Hardware Auto Connect

When enabled, the OS10 automatically detects removal or new connection of a device to the same USB port. The **Com Port** number for this (new) device will be identically to the port number of the previously connected device. Then the OS10 will immediately connect to this (new) device and automatically begin downloading all necessary data from the device.



It must ALWAYS be used the same USB port (also by connecting via a USB hub).

If this feature is turned off, the connection must be done by the configuration tool resp. has to be initiated via serial interface. The current state will be shown in the status bar (see next page).

3.5 Status Information

All important information about the COM Port are indicated in the status bar (see figure):

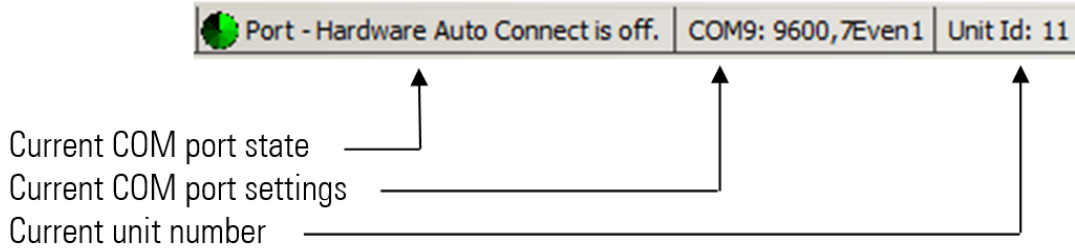


Figure 3-8 Serial Configuration: Status Bar / COM Port Information

3.5.1 Current COM Port Status

The current COM port status indicates the operating status of the serial interface and the condition of the feature „Hardware Auto Connect”.

<p>Figure 3-9 Serial Configuration: Current COM Port Status</p>	<p>(1) Left: The current state of the serial interface is shown as an icon. The table below shows all different states and their meanings.</p> <p>(2) Right: Indicates the current state of Hardware Auto Connect (see table on next page)</p>
--	--

(1) COM Port Status

The serial interface has for different states: Down, Close, TryOpen or Working (see table below):

Icon	Status	Meaning	Tool Tip Text
	Down	The serial interface does not work. Reason: Either the serial interface has been removed or no interface is connected.	"Device is down ..."
	Close	The serial interface is closed.	"Device is close ..."
	TryOpen	The OS10 tries to open the selected interface. Remark: This can take up to 3-5 seconds, depending on the "serial to USB" converter.	"Try open select Device ... "
	Working	The interface is working correctly.	"Device is working ..."

Table 3-5 Serial Configuration: Status of the Serial Interface

General: When removing the interface, the COM Port state is automatically set back to DOWN.

(2) Hardware Auto Connect

Regardless of the COM Port state, the current setting of Hardware Auto Connect is displayed.



Status Display	Meaning
 Port - Hardware Auto Connect is ON.	Hardware Auto Connect is enabled
 Port - Hardware Auto Connect is off.	Hardware Auto Connect is disabled

Table 3-6 Serial Configuration: Hardware Auto Connect

Current COM Port Settings

This item indicates the actual COM Port Settings as well as the warning messages „No com port selected” and **”No com port available”**.

Status Bar Info	Meaning
COM9: 9600,7Even1	COM Port is connected and in use.
Warning: no com port	No COM Port selected , but at least one is connected
Warning: no com port (flashes)	No COM Port available

Table 3-7 Serial Configuration: Current COM Port Settings

Current Unit Number

The last item indicates the currently used unit number:

Status Bar Info	Meaning
Unit Id: 11	Current unit number

Table 3-8 Serial Configuration: Current Unit Number

4 Editor Tool for Parameter Files

The **File Editor** is a helpful tool, which allows editing and saving parameter files quickly and easily. It can be used selectively as „stand-alone“ editor (without a connected unit) or in combination with a unit which is connected by the COM port.

The editor can be used

- as stand-alone editor
 - to load and save parameter data sets,
 - to edit parameter data sets,
 - to prevent changes at the parameter data sets („Write Protected“),
 - to print parameter data sets.
- in combination with a connected device
 - to save device parameter data sets in files,
 - to select and free switch the available parameters in the parameter list.

The editor is located on the left half of the screen. The right half shows an OS10 window:

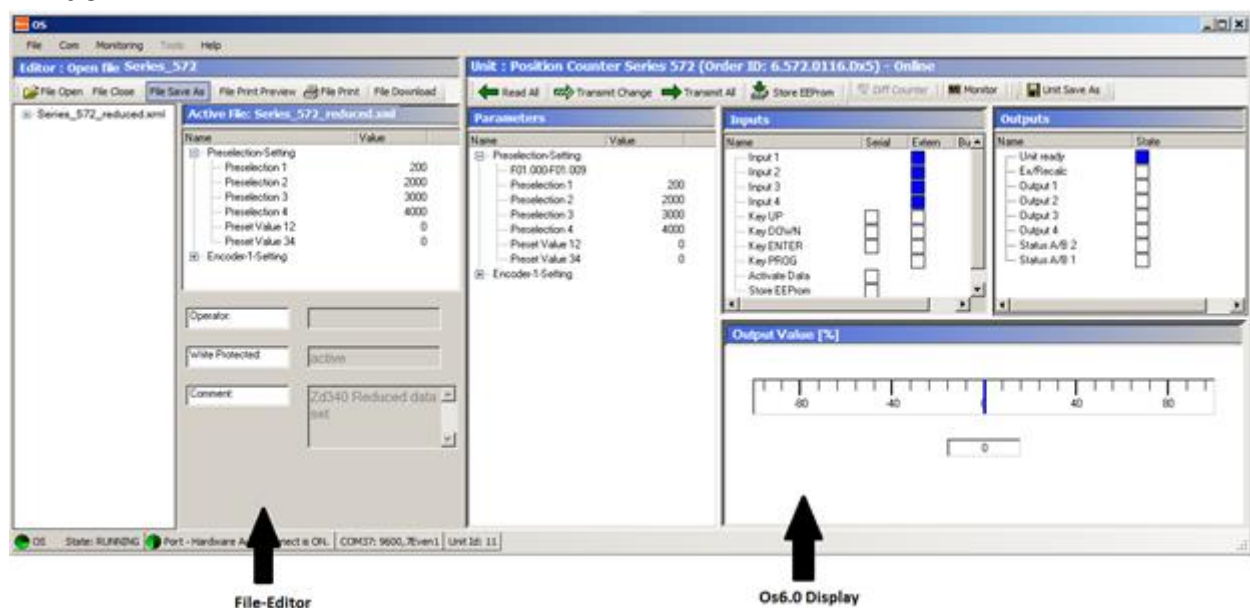


Figure 4-1 File Editor: Parameter list with reduced parameters

4.1 Opening the Editor

Stand-alone	The File-Open Editor must be opened to edit an existing parameter data file. An Open file dialog appears and the desired parameter file can be selected.
Combined	In combination with a connected unit, the editor is used to backup the current parameter data sets. Two cases are possible: 1. A parameter data set has to be saved in a file. The backup starts by pressing the button " Unit Save as ". 2. The serial connection to the device is interrupted (see chapter 2.7 "Exception: Lost Connection...").

Table 4-1 File Editor: Opening the Editor

4.2 Operation of the editor

For the general operation of the editor a **button** or **menu bar** and a **popup-menu** are available (see also the illustration on the next page).

Information on the currently loaded file can be found in the **File information**.

The currently loaded parameter data set can be modified in the window "**List of parameters**".

The "**Input field**" is used for saving the current parameter data set in a file. This saving can be done with or without "**Write Protected**".



A parameter data set that is marked (by using the file editor) with „**Write Protected**“

- **CANNOT** be changed ("read-only"),
- **CANNOT** be saved in an existing file („Write-protection").

The following three pictures show the individual operation elements:

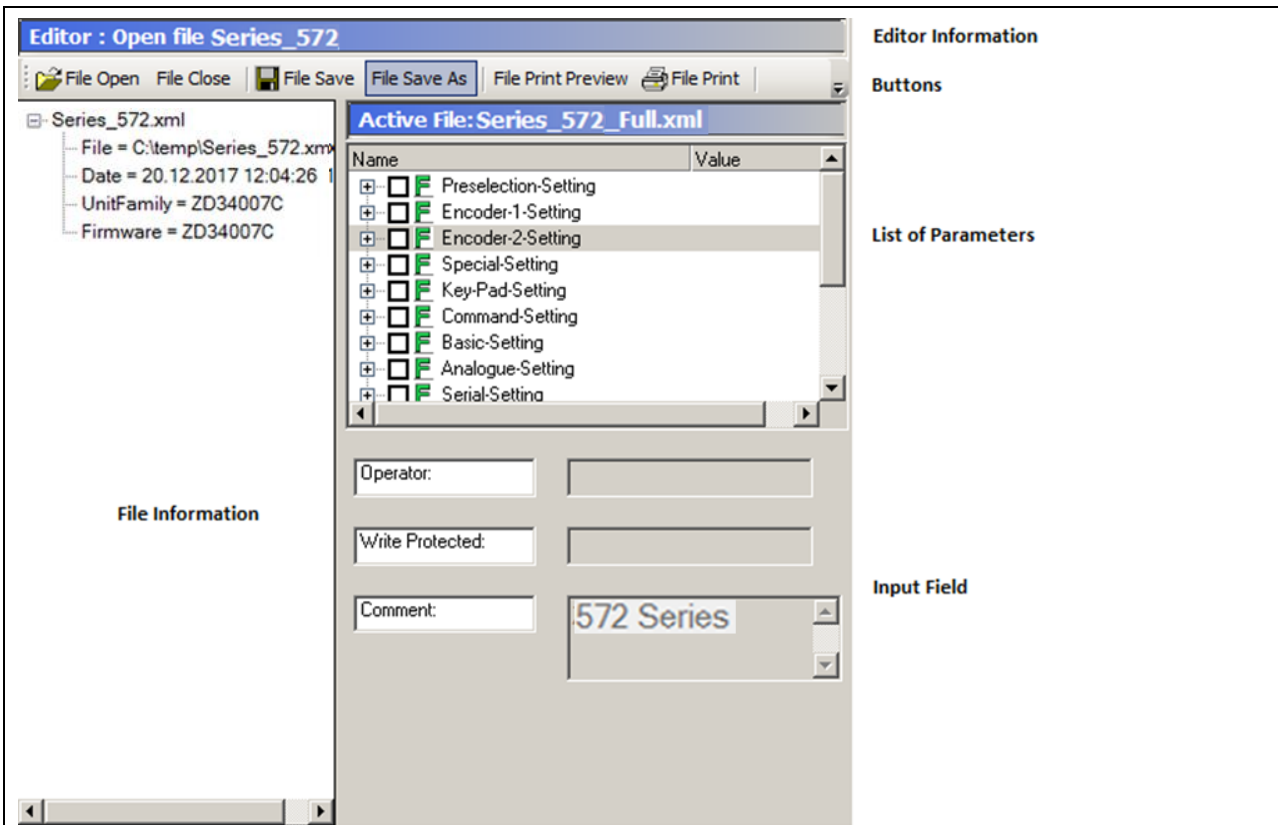


Figure 4-2 File Editor: Components

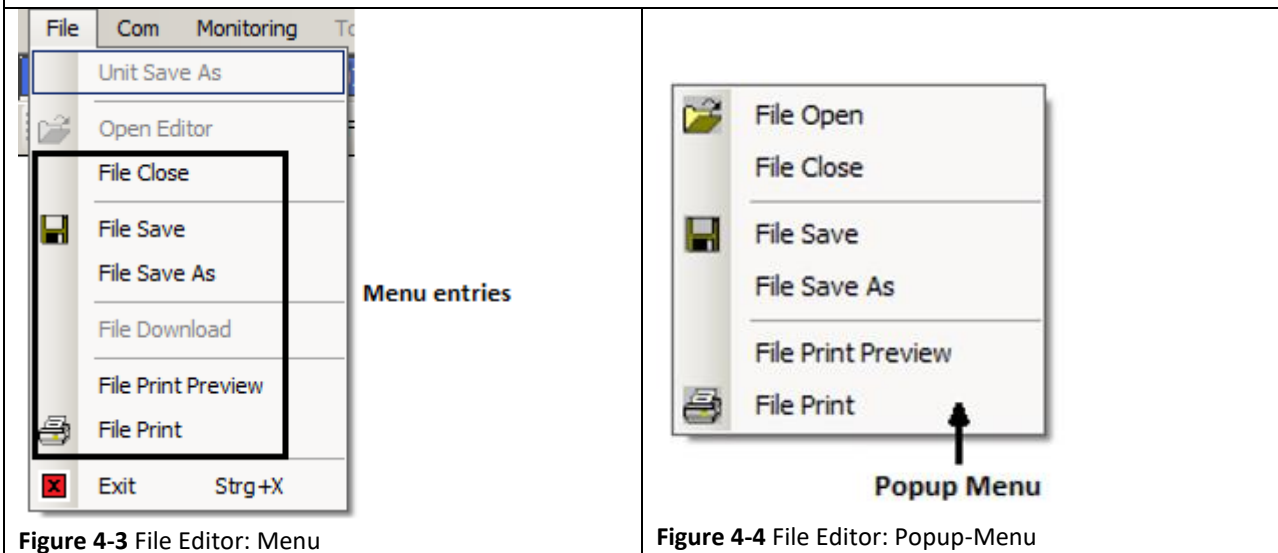


Figure 4-3 File Editor: Menu

Figure 4-4 File Editor: Popup-Menu

Operating elements of the editor

The available operation elements are described in the following table:

File Open	Opens a new data file. The software is able to proceed the former .par as well as the newer .xml format. The selection is made via file extension.	Overwrites the currently opened data file in the editor.
File Close	Closes the file and the editor.	No saving of the current data file. The current data file is deleted automatically from the file editor.
File Save	Saves to the current data file in the corresponding file.	Restriction if "Write Protected" is selected: It is not available and not visible.
File Save As	Saves the current data file with a user defined name.	The user name entry, set "Write Protected" and a comment about the file can be left here. Restriction if "Write Protected" is selected: In this case the overwriting of existing files is not allowed.
File Print Preview	Creates a preview of the currently opened file.	Only usable with an installed printer!
Print	The opened file will be printed out.	Only usable with an installed printer!
File Download	Copies the actual file into the OS10 window in order to transmit it to the connected unit.	Only usable with a connected target unit. The editor-file has to be compatible with the parameter data of the target unit.

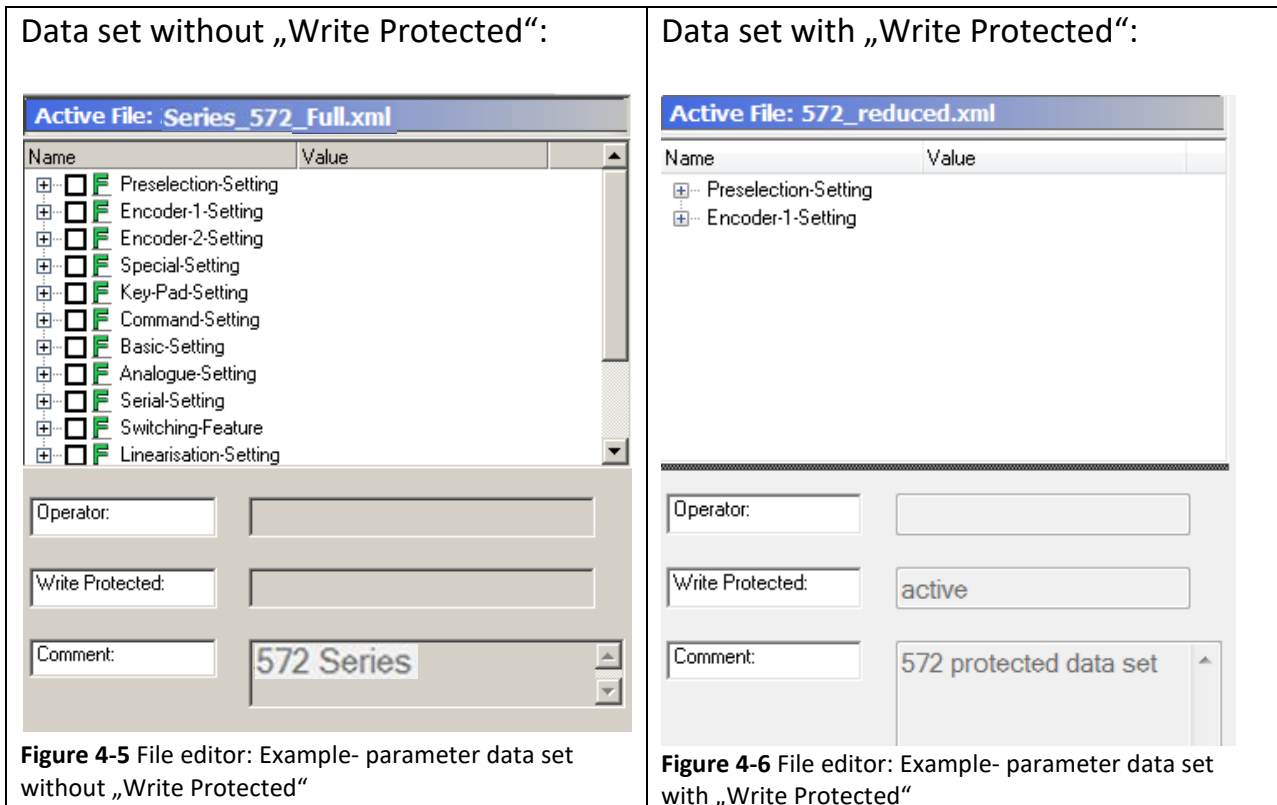
Table 4-2 File-editor: Operation elements

4.2.1 Load a new parameter data set from a file

A new parameter data set can be loaded from a file using **File Open**.

After clicking **File Open** a choice menu opens automatically and the desired parameter file can be selected and loaded.

The editor automatically recognizes whether a data set with or without "Write Protected" exists (see examples below).



If „**Write Protected**“ is active, all blocked features are disabled.

4.2.2 Edit parameter data sets

The individual parameter values can be edited in the editing window "**List of parameter**".

In addition, there is the possibility to select individual menus/parameters.

The selection of the displayed menus/parameters can be suitable adjusted for the parameter list of OS10 with "Write Protected".

Edit parameter data sets

The editing of the parameter values is analog to the editing of the parameter list of the OS10 window (see also chapter 2.3.2 edit parameter values). However, the changed parameters are not marked.

The selection of the displayed parameter values or menus.

In the editing window, two symbols are used (see table below).

Symbol	Description
<input type="checkbox"/> F	Free switched: The menu or the parameter is displayed.
<input checked="" type="checkbox"/> B	Blocked: The menu or parameter is blocked and not displayed.

Table 4-3 File editor: Identification – Free switched / Blocked

The selection „Free switched <-> Blocked“ is done by clicking on the square next to the letter.

A menu entry changes all subordinated parameter entries.

4.2.3 Saving a parameter data set

There are two methods available to save a parameters data set.

1. File Save

Via „**File Save**“ the current parameter set is automatically written in the corresponding data file. The file name and location are deposited in the file information.

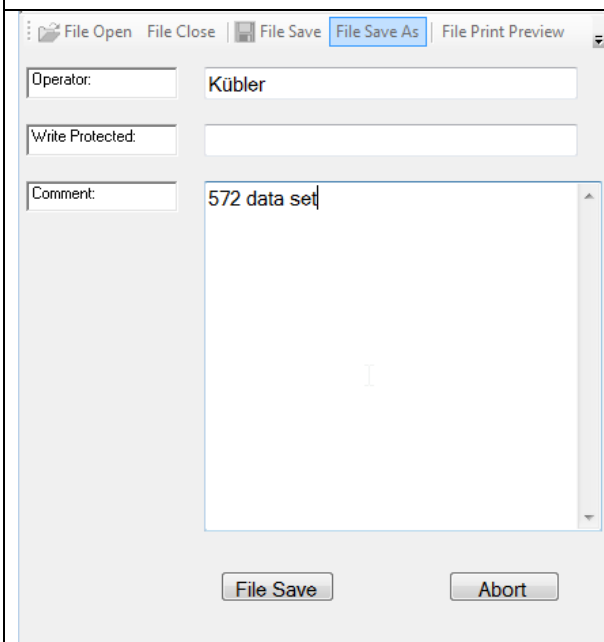
- A change of file name or location is not possible.
- A change in the optional parameters "**Operator**", "**Write Protected**" and "**Comment**" is not possible.
- All entries in this file will be overwritten.
- This option exists only if "Write Protected" is not already selected in a previous save operation.

2. Files Save As

Via „**File Save As**“ the current parameter set can be written in any data file. After clicking on "File Save As" one of the following parameter change windows opens.

Condition(s):

If a file without „**Write Protected**“ or no file is loaded in the editor, the change window without „Write Protected“ opens.

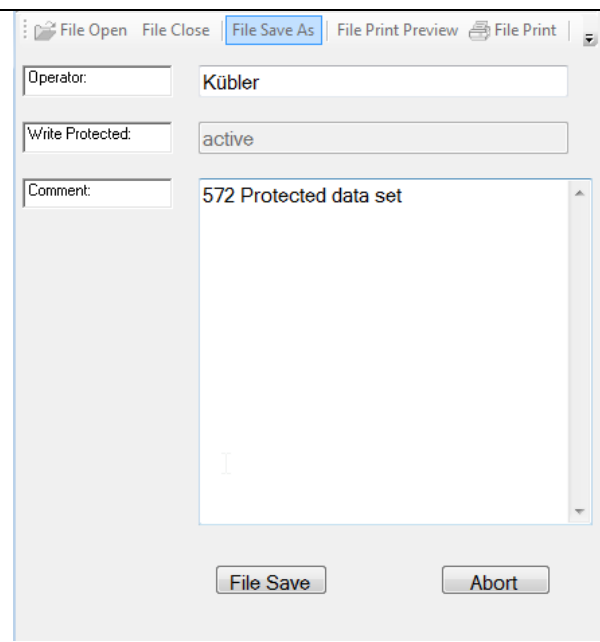


The screenshot shows a dialog box titled 'File Save As' with a menu bar containing 'File Open', 'File Close', 'File Save', 'File Save As', and 'File Print Preview'. The dialog has three input fields: 'Operator' with the value 'Kübler', 'Write Protected' which is empty, and 'Comment' with the text '572 data set'. At the bottom, there are two buttons: 'File Save' and 'Abort'.

Figure 4-7 File Editor: Change window for optional parameters (without „Write Protected“)

Condition:

If a file with „**Write Protected**“ is loaded in the editor, the change window with „Write Protected“ opens.



The screenshot shows a dialog box titled 'File Save As' with a menu bar containing 'File Open', 'File Close', 'File Save As', 'File Print Preview', and 'File Print'. The dialog has three input fields: 'Operator' with the value 'Kübler', 'Write Protected' with the value 'active', and 'Comment' with the text '572 Protected data set'. At the bottom, there are two buttons: 'File Save' and 'Abort'.

Figure 4-8 File Editor: Change window for optional parameters (with „Write Protected“)

Please note the following:

Clicking the "file save" button will open a file dialog box. Saving is the same as under Windows. Only after the store operation a superior write protection is enabled and the file editor is adapted.


Optional parameters	Description						
Operator	<u>Name of the operator:</u> Changing this parameter is always allowed.						
Write Protected	<u>Indicator for write protection:</u> A change in this parameter is subject to the following limitations: <div data-bbox="448 719 1406 808" style="border: 1px solid black; padding: 5px; margin: 10px 0;">  A set and saved „Write Protected“ cannot be changed via file editor. </div> Setting of „ Write Protected “: <table border="1" data-bbox="448 943 1406 1077" style="margin: 10px 0;"> <thead> <tr> <th data-bbox="448 943 759 987">Text</th> <th data-bbox="759 943 1406 987">Meaning</th> </tr> </thead> <tbody> <tr> <td data-bbox="448 987 759 1032">„active“</td> <td data-bbox="759 987 1406 1032">write protection enabled</td> </tr> <tr> <td data-bbox="448 1032 759 1077">all other texts</td> <td data-bbox="759 1032 1406 1077">write protection disabled</td> </tr> </tbody> </table> The write protection is enabled with the <u>completion of saving</u> .	Text	Meaning	„ active “	write protection enabled	all other texts	write protection disabled
Text	Meaning						
„ active “	write protection enabled						
all other texts	write protection disabled						
Comment	<u>Any comment</u> Changing this parameter is always allowed.						

Table 4-4 File Editor: Optional parameters

- For parameter data sets without "Write Protected" the overwriting of existing files is allowed.
- For parameter data sets with "Write Protected" the overwriting of existing files is not allowed and is blocked automatically. The parameter data sets must be saved in a new file.
- All entries in the file are completely newly created or overwritten.

By clicking the "**Abort**" button, the operation can be terminated at any time without saving.

4.2.4 Printing parameter data sets

There are two ways available for the printing of parameter sets.

File Print Preview (Print Preview):

A print preview window opens after clicking "**File Print Preview**". In this window, the print can be checked visually. An adaptation of the print is not possible.

File Print (Immediate Printing)

After clicking on "File Print" the "Windows standard" printer selection opens. In addition to the selection of the printer a printer-specific adaptation is also possible.

4.3 Data Exchange between File Editor und OS10 Window

4.3.1 File Editor → OS10 Window

In order to ensure the compatibility between editor and a loaded parameter-set of a connected target unit, the following requirements must be fulfilled:

Compatibility conditions of the file downloads	
1. Unit family:	The first five characters of the unit family and the loaded parameter-set must be identically. The characters are not case-sensitive.
2. Firmware	a.) Standard Firmware: The first seven characters of the firmware and the loaded parameter-set must be identically. The characters are not case-sensitive.
	b.) Special Firmware: All characters of the firmware, editor file and loaded parameter-set must be identically.

In case of unfulfilled compatibility conditions the **File-Download** button is grayed-out automatically (see example below). In the figure below the first 7 characters do not match:

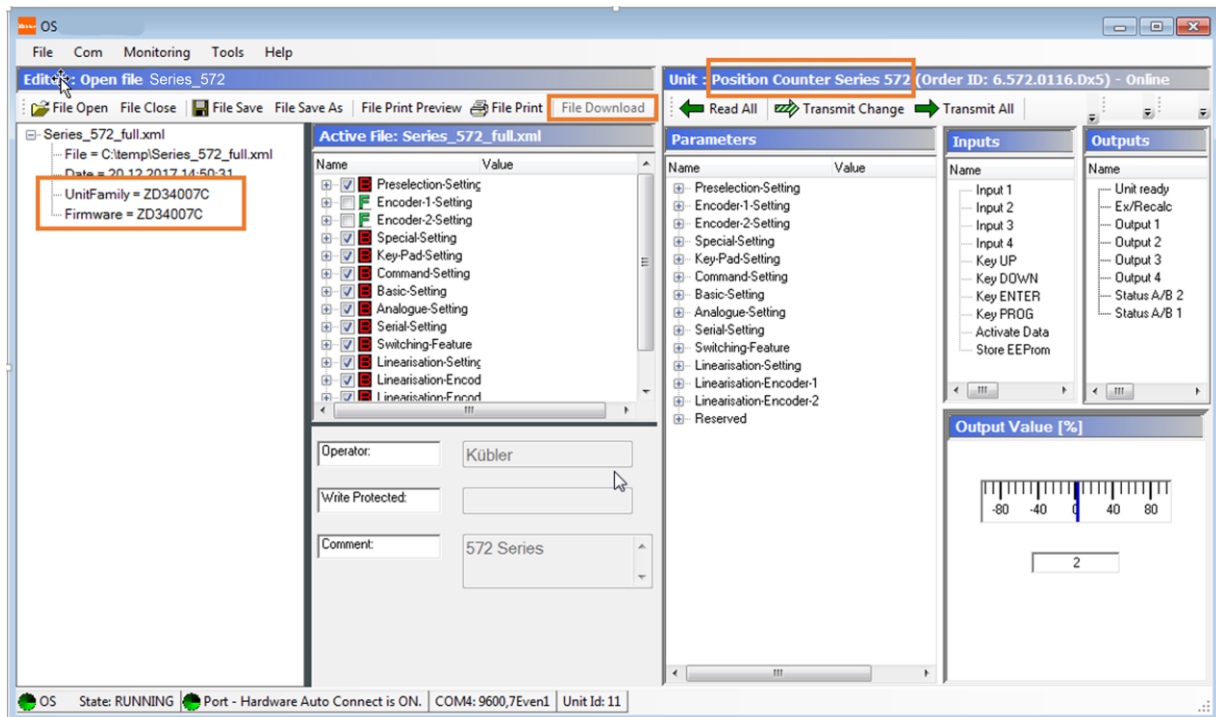


Figure 4-9 File Editor: Data Exchange not allowed

If the compatibility conditions are met, the following is executed after clicking the **“Download File”** Button:

- For data sets without **“Write Protected”** only **“free switched”** parameters or menus are transmitted to the OS10 window. **Only these “free switched” parameters will then be overwritten** and automatically highlighted **red** in the OS10 window. Blocked parameters are not displayed (see figure below).

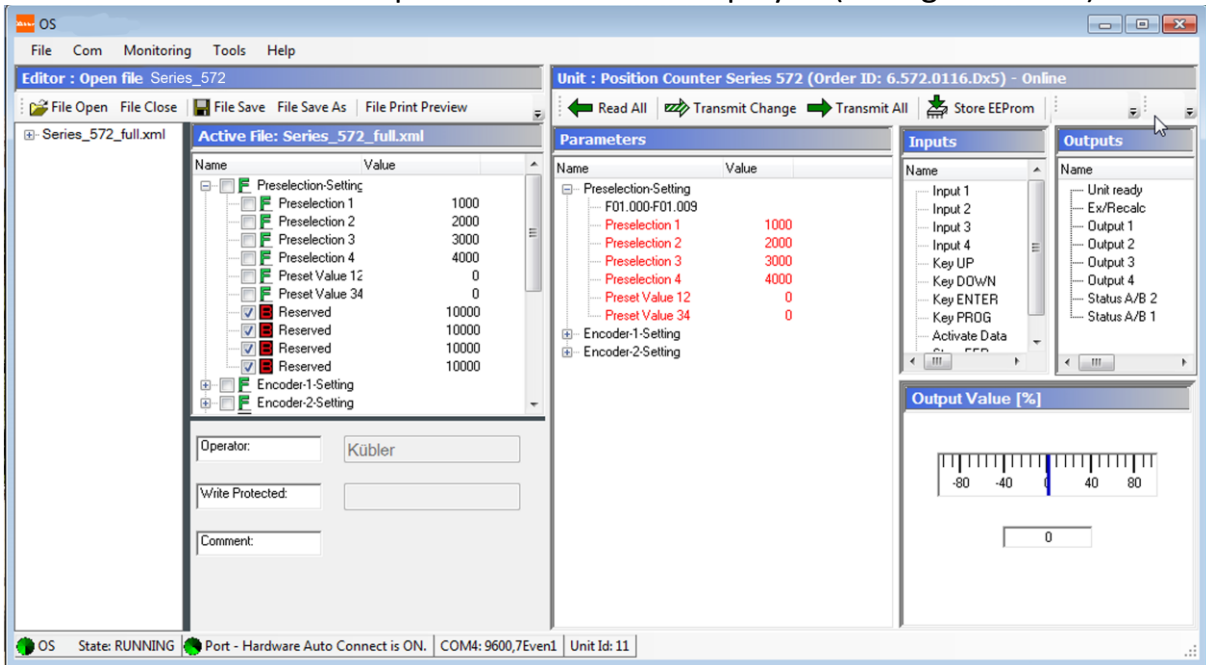


Figure 4-10 File Editor: Data exchange for data sets without "Write Protected"

- For data sets with **“Write Protected”** only the visible parameters or menus are transmitted to the OS10 window. **Only these visible parameters will then be overwritten** and automatically highlighted **red** in the OS10 window. Blocked parameters are not displayed (see figure below).

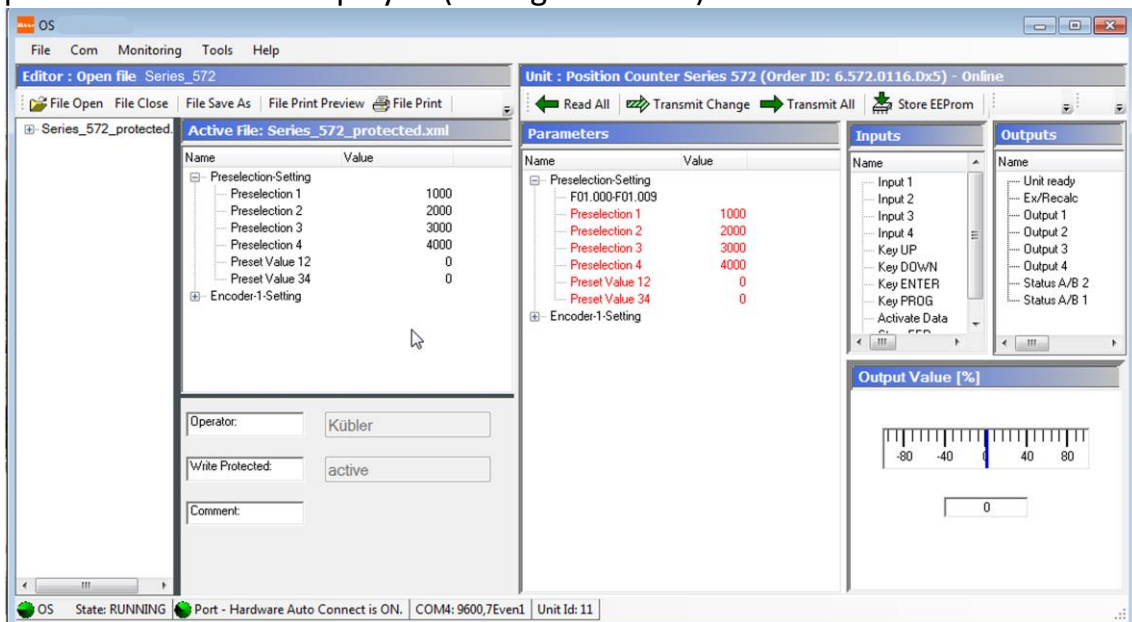


Figure 4-11 File Editor: Data exchange for data sets with „Write Protected“

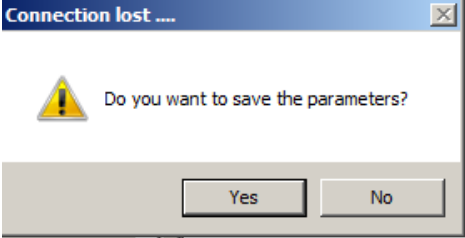
Now all **new parameters** can be transmitted to the target unit.

4.3.2 File Editor ← OS10 Window



All parameters of the OS10 window (also the blocked parameters) will be taken over in the file editor.

There are two possibilities to transfer data from the OS10 window into the editor.

Active possibility	Passive possibility
<p>Active by using the Unit Save As button</p>	<p>Passive because Connection lost ... is detected</p> <p>With a lost connection between the OS10 surface and the target unit the exception Connection lost ... is activated automatically.</p> <p>The following pop-up warning appears:</p> 
<p>If clicking the Unit Save As button...</p>	<p>If clicking the Yes button...</p>
<p>... the editor input field opens left beside the OS10 field.</p>	

If a file without „Write Protected“ or no file is opened in the editor, the following window will appear:

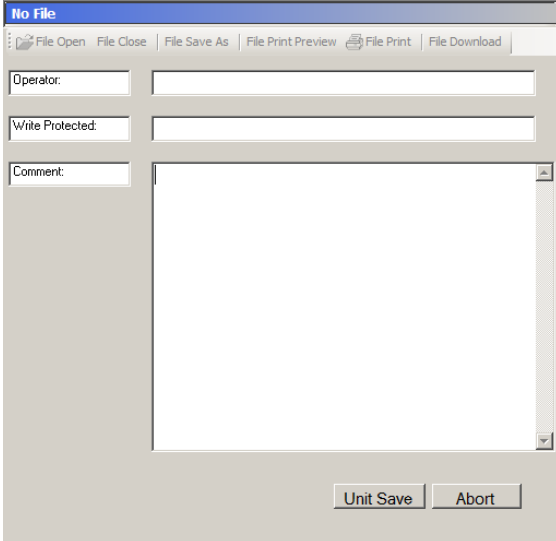


Figure 4-12 File Editor: Change window for optional parameters (without „Write Protected“)

If a file with „Write Protected“ is opened in the editor, the following window will appear:

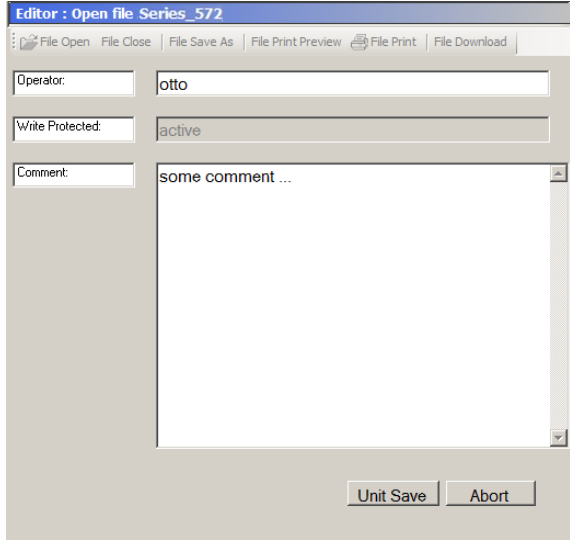


Figure 4-13 File Editor: : Change window for optional parameters (with „Write Protected“)

Saving parameters is described in chapter “4.2.3 Saving a parameter data set”.

5 Tools Menu



The tool menu is used to provide additional (external) tools and is only available in special versions of the OS10.

6 Help Menu

The Help menu summarizes all help or update options for OS10 (Fig.: 5-1).

The main menu is divided into two areas. An upper area with the two menus “**Show help**” and “**Web Page**” and a bottom area in which all the updates of the OS10 have been summarized. The upper menus are presented directly below. The update procedures are explained individually in the next chapters.

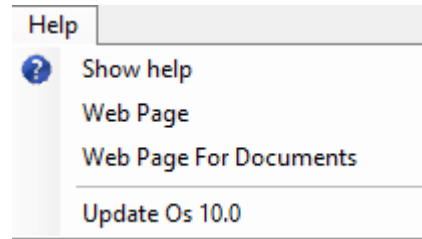


Figure 6-1 Overview Help menu

Please note that the following applies to all update procedure:



Regardless of the update method the OS10 will closed for security reasons and restarted after the execution of this update.

Clicking on the “**Show Help**” menu will open the current documentation directory automatically. (Fig.: 5-2).

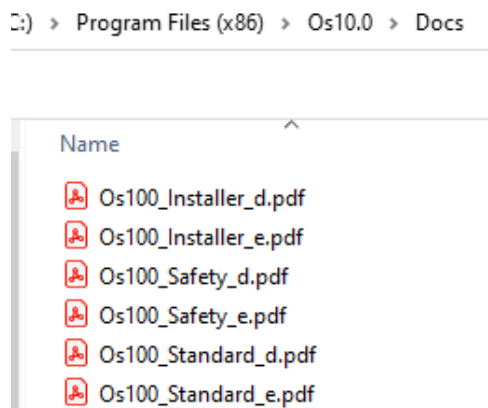


Figure 6-2 Current Documentation Directory



For opening and viewing the document a suitable PDF reader must be installed.

Clicking on the “**Web Page**” menu opens the current producer web page. Clicking on the “**Web Page For Documents**” menu automatically opens the web page with additional documents from the current manufacturer's website.

6.1 OS10 Update

Clicking the menu **Update OS10** starts the update of the OS10. The update process comprises of the following steps:

1. Automatically update check

First, the update program checks whether a new update is available.

Two different cases are possible:

Case 1: no update is available

Case 2: a new update is available

Case 1: no update is available

Clicking the **OK**-button closes this window and returns to the OS10.

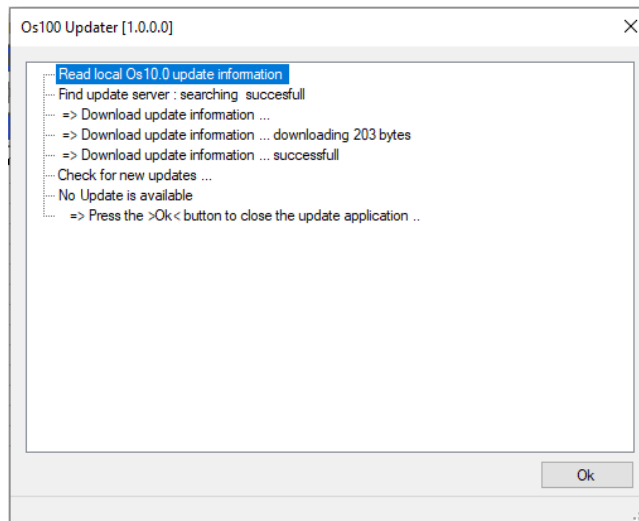


Figure 6-3 Update OS10 - No Update is available

Case 2: a new update is available

The update can be **installed or cancelled**.

Clicking the **No**-button closes the update program and starts the OS10 automatically.

The update can be started later again.

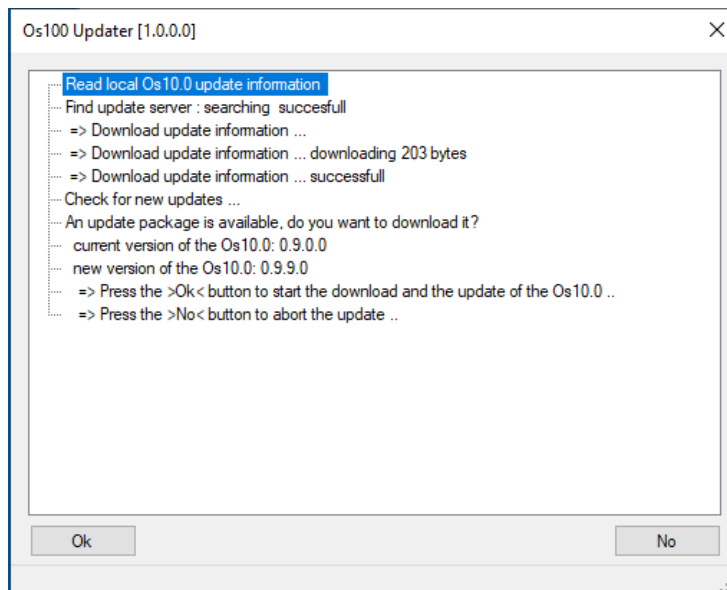


Figure 6-4 Update OS10 - Update available

Clicking the **Ok**-Button, starts the download and the update of the new version.

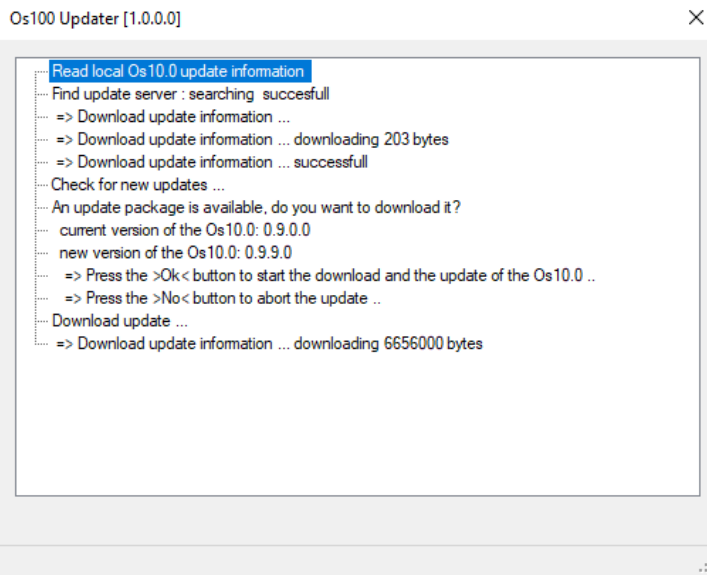


Figure 6-5 Update OS10 – Download Update

2. Update to a new version

The update is performed in the following steps:

- 1) Showing the „License Agreement“
- 2) Unpacking and Installation

7 Installation

7.1 General information about the installation

This manual describes the installation process of the OS10.0 user interface on a computer with Microsoft® Windows as the operating system.

The OS10.0 is suitable for the Windows 8.1 and 10 operating systems.



Important:

The activation code: >52094< is required for installation and update.

This operator software can be installed from a DVD, a USB stick or a local disk directly.

For reasons of convenience, an installation from the local hard drive is assumed.



Removing of old OS10.0 software:

This installer removes old OS10.0 software automatically. If this is not possible, the installation program stops and the old OS10.0 must be removed manually.

Multi-User-Installation:

OS10.0 is **always** installed for all users (multi-user). Installation for a single user is not possible.

Administrator rights:

The installation and deinstallation of the OS10.0 software require **administrator rights**.

.NET Framework 4.6.1

The OS10.0 software requires the ".net Framework 4.6.1" from Microsoft®.

Driver-Installation (only Windows 8.1)

The OS10.0 **has to be installed before** the driver can be installed. The USB device has to be connected with the PC.

7.2 Installation of the OS10.0

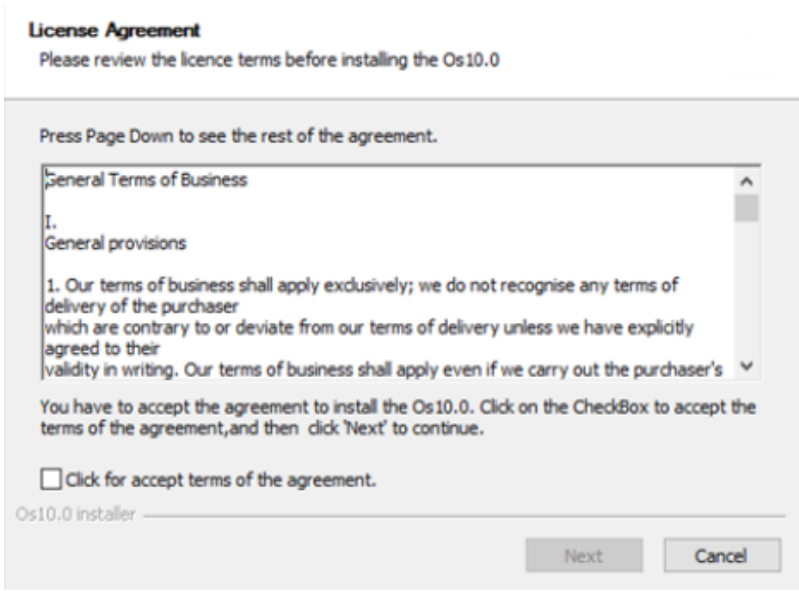
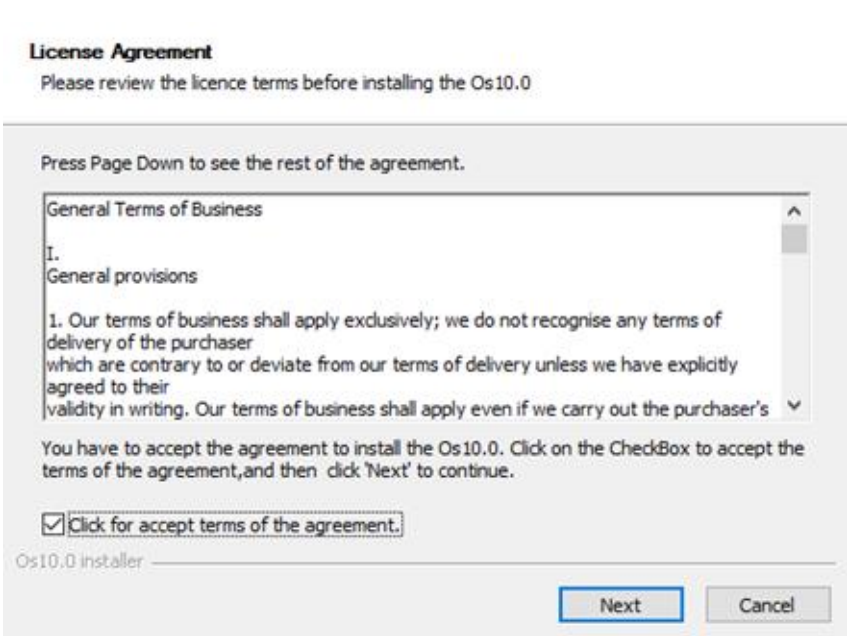
This operator software can be installed from a DVD, a USB stick or a local disk directly.

For reasons of convenience, an installation from the local hard drive is assumed.

Open the directory in which the installation package is saved. Please start the installation package with administrator rights. The installation of the OS10.0 is largely automatic.

7.3 Preparing for installation

The preparation for installation is running in the background (silent) and only in an error case a message box is shown with information of this error.

View of the license agreement	
<p>To read the agreement in full, you can scroll down using the arrow button.</p>	 <p>Figure 7-1 license agreement</p>
<p>Please click on „Click for accept ...“ to to accept the license agreement.</p> <p>To stop the installation please click on the „Cancel“ button and for starting please click on the „Next“ button.</p>	 <p>Figure 7-2 accept license agreement</p>

View of the license agreement

To read the warning notices in full, you can scroll down using the arrow key.

Please click on the „**I Agree**“ button to accept this warning notes and to start the installation of the OS10.0.

For stopping the installation please click on the „**Cancel**“ button.

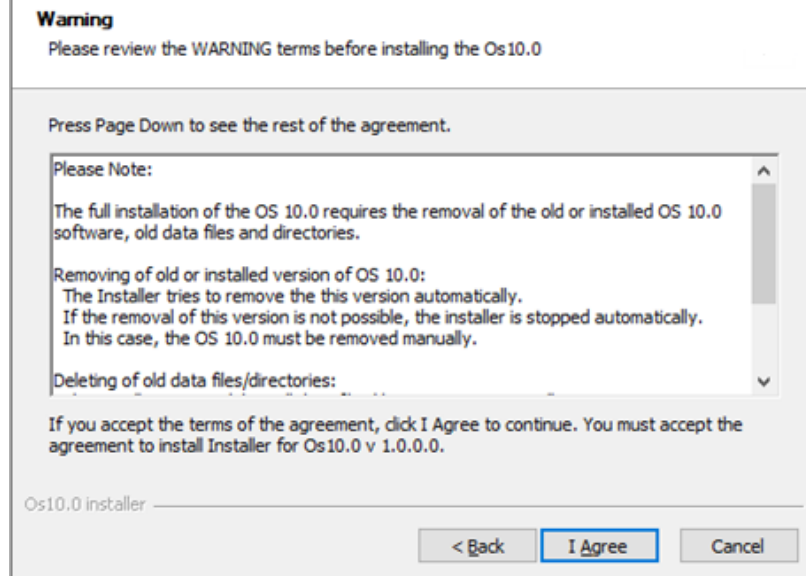


Figure 7-3 Warning notices



The installation program automatically checks whether the operating system used supports it. Only in the case of an unapproved operating system (see also appendix) will a warning message be issued or the installation program stopped.

The installation program then checks whether the administrator rights required for execution are available. If not, the required administrator password is automatically requested.

7.4 Installation

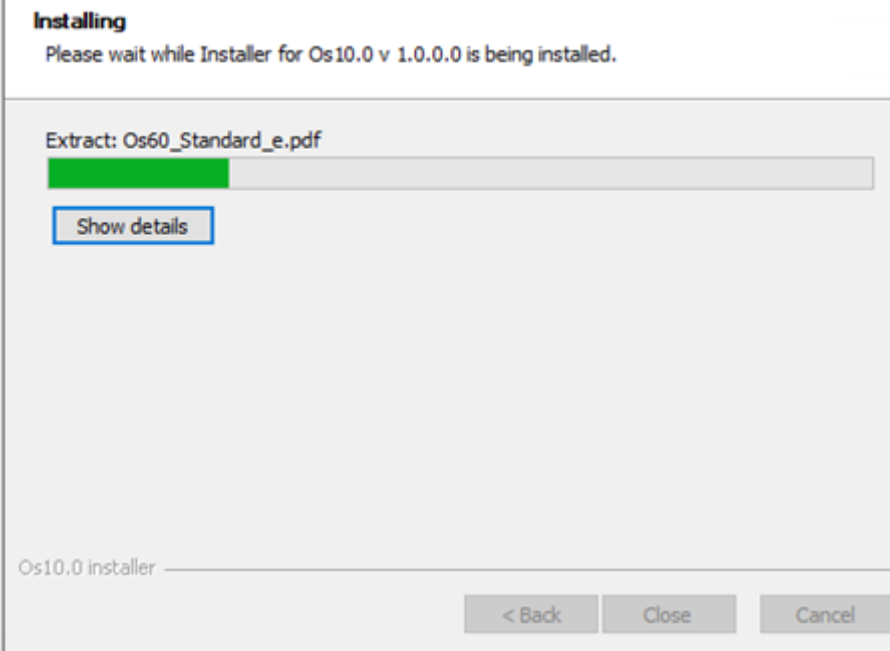
Installation	
<p>The installation runs automatically.</p>	 <p>Installing Please wait while Installer for Os10.0 v 1.0.0.0 is being installed.</p> <p>Extract: Os60_Standard_e.pdf</p> <p>Show details</p> <p>Os10.0 installer</p> <p>< Back Close Cancel</p>

Figure 7-4 Installation

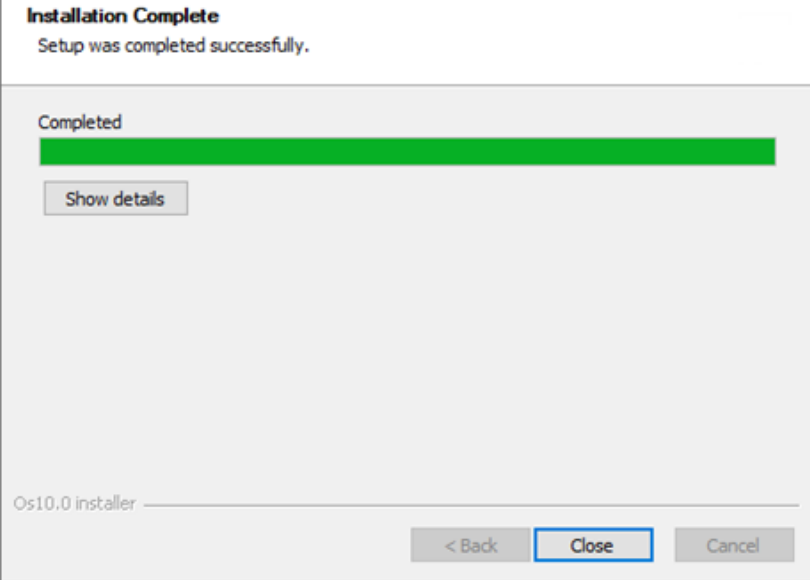
<p>Please click on the Close button to finishes the installation.</p>	 <p>Installation Complete Setup was completed successfully.</p> <p>Completed</p> <p>Show details</p> <p>Os10.0 installer</p> <p>< Back Close Cancel</p>
--	---

Figure 7-5 Finish of the installation

The OS10.0 requires the .net Framework 4.6.1 from Microsoft. This framework is included in the installation package.



The installation program checks whether the .net Framework 4.6.1 is installed on the computer. If not, the installation will start automatically. Please follow the instructions in this installation package of the .net Framework 4.6.1.



The computer may need to be restarted.

7.5 End of installation

After the installation is complete, OS10.0 can be started in two ways.

Starting of the OS10.0	
Via Desktop Icon	 Figure 7-6 OS10.0: Desktop Icon
Via Start menu	 Figure 7-7 OS10.0: Startmenü

8 Installation of USB device drivers

8.1 Windows 8.1



Please note:

The OS10.0 **have to be installed before** driver installation can be executed. For the installation of the USB-Device driver, **administrator rights** are required. Further, the USB-Device **have to** be switched on and already connected to the USB port of the PC.

The driver installation needs an **INF file** (also called **Setup Information file**), which can be found in the following directory of the already installed OS10.0:

“C:\Program Files (x86)\Os10.0\Drivers\Win7_8”...

The software will detect and select the respective file automatically.

Open the device manager: Start → Control Panel → Device Manager

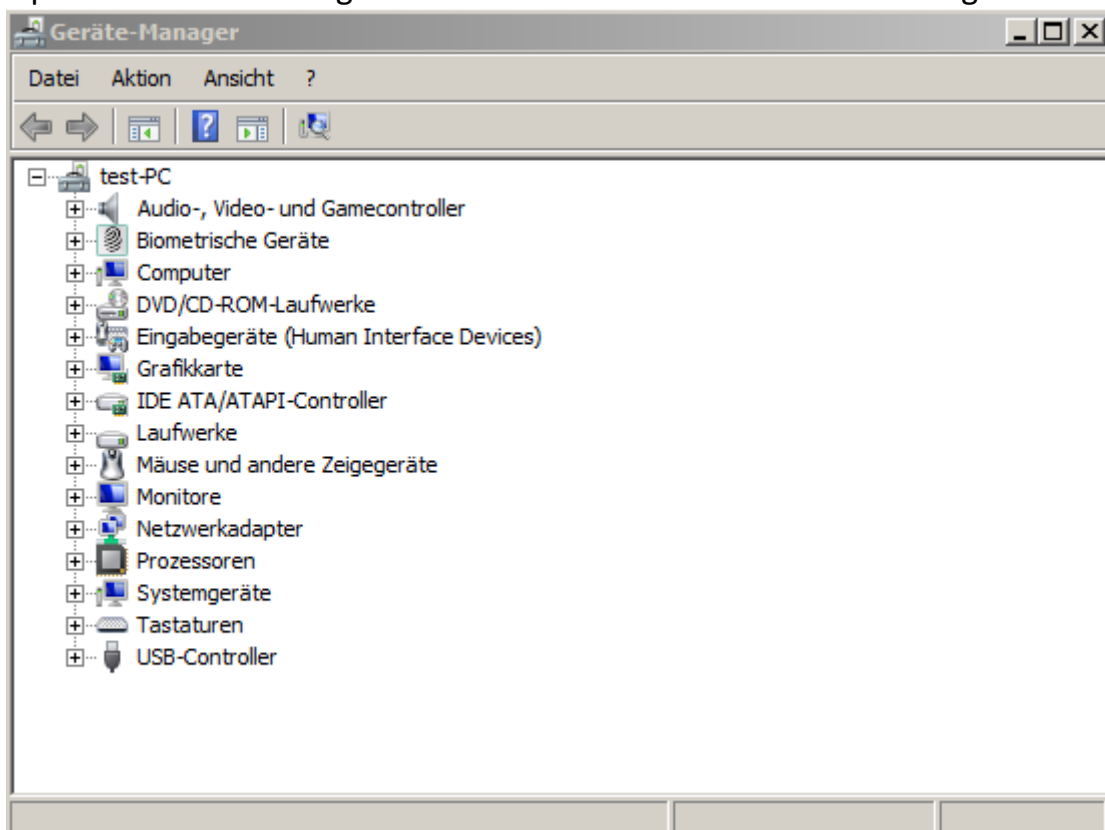


Figure 8-1 Driver installation: device manager

Connect the device. Depending on the current configuration of the operation system a submenu “Other device” is added. If the operation system tries to download the device driver software via windows update, abort this by clicking “Skip obtaining driver software from Windows Update”.

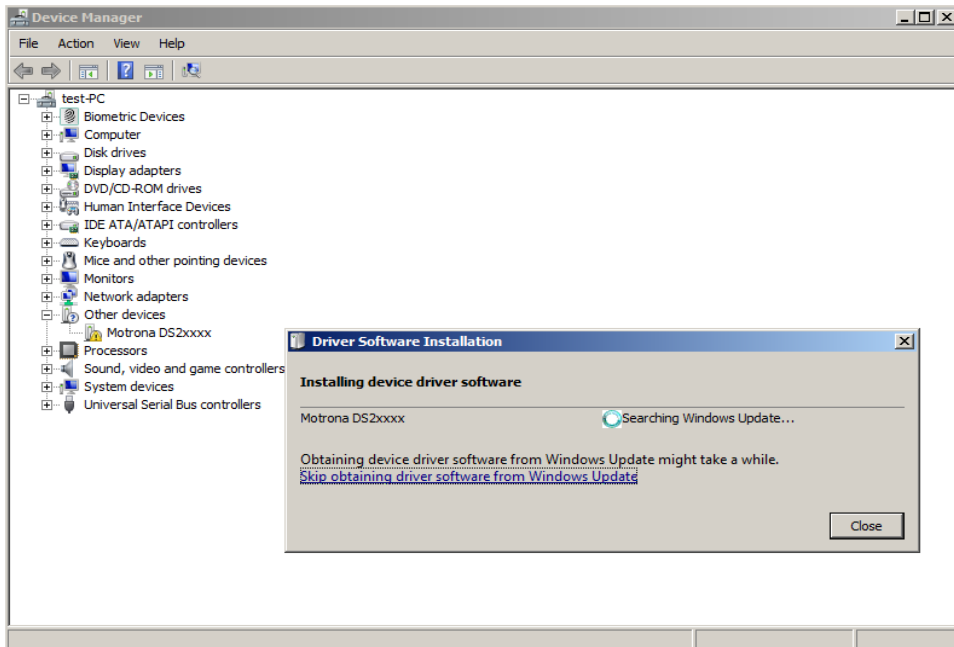


Figure 8-2 Driver installation: Windows Update ... abort

Clicking with the right mouse-button on the entry “DS2xxxx”, a pop-up menu will be opened. Select ...”Update Driver Software”

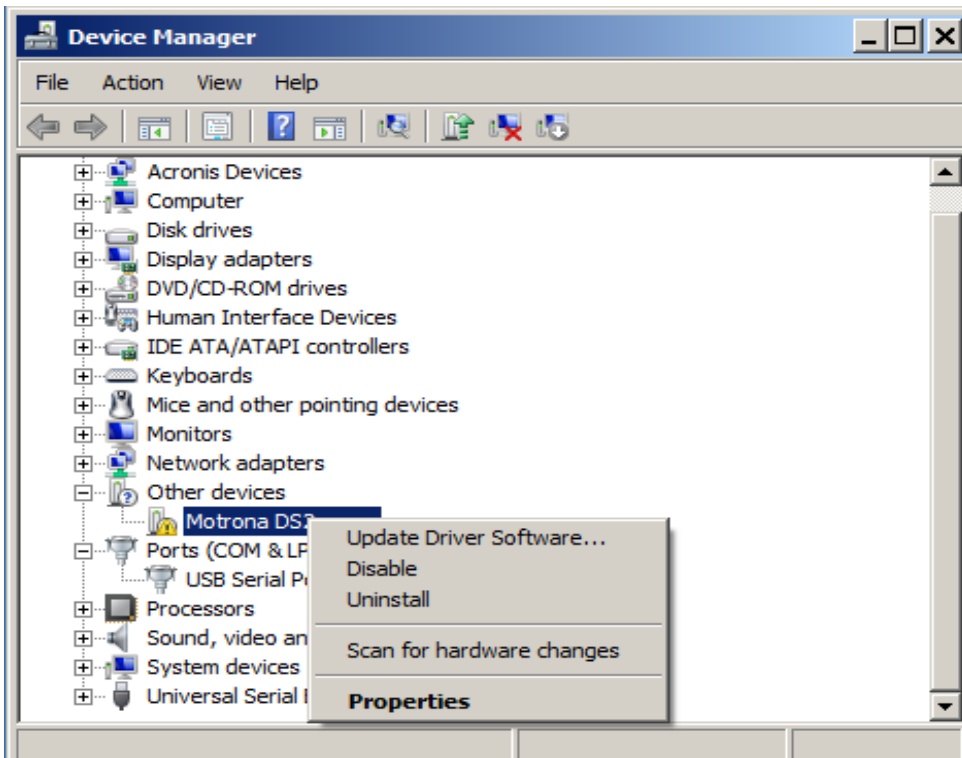


Figure 8-3 Driver installation Pop-up “Update Driver Software...”

Then select **“Browse my computer for driver software”** in the windows dialog **“Update Driver Software”**.

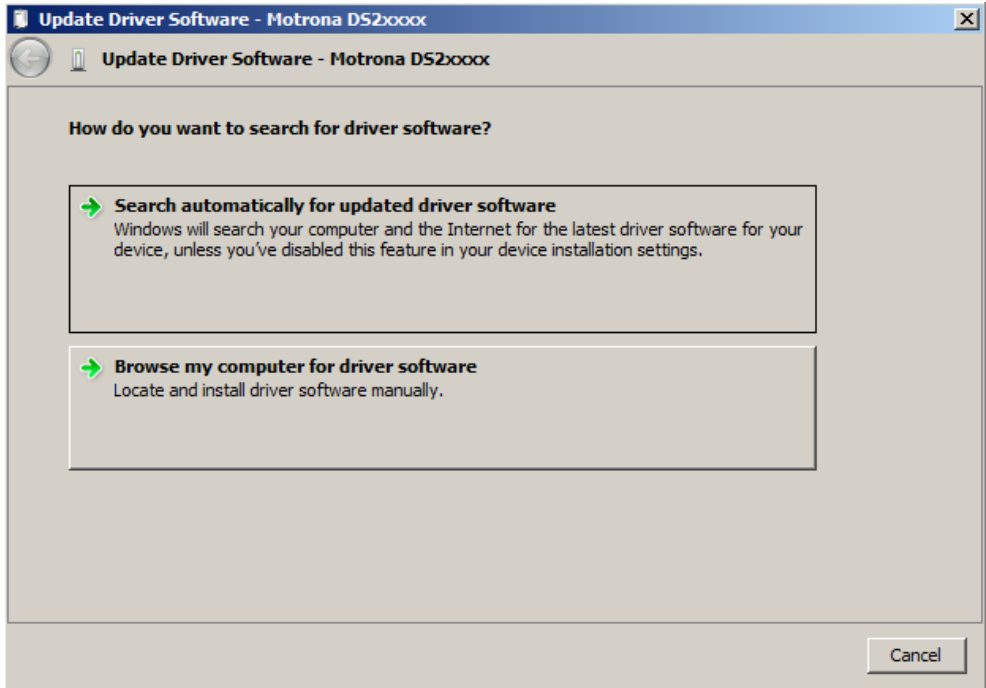


Figure 8-4 Selection window **“Browse my computer for driver software”**

Use **C:\Program Files (x86)\Os10.0\Drivers\Win7_8** as search path and click **“Next”** to continue

A new window **“Windows Security”** appears.

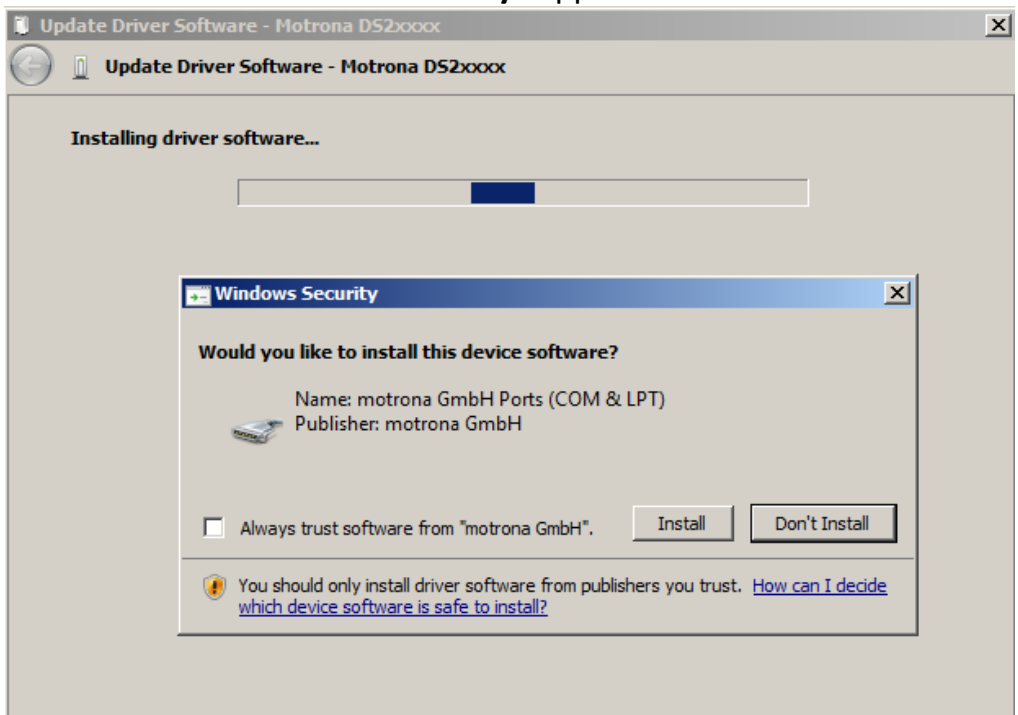


Figure 8-5 Security message after signature check

Clicking on **“Install”** starts the installation.

When the installation of the device driver is completed, click the **“Close”** button to finish the installation procedure.

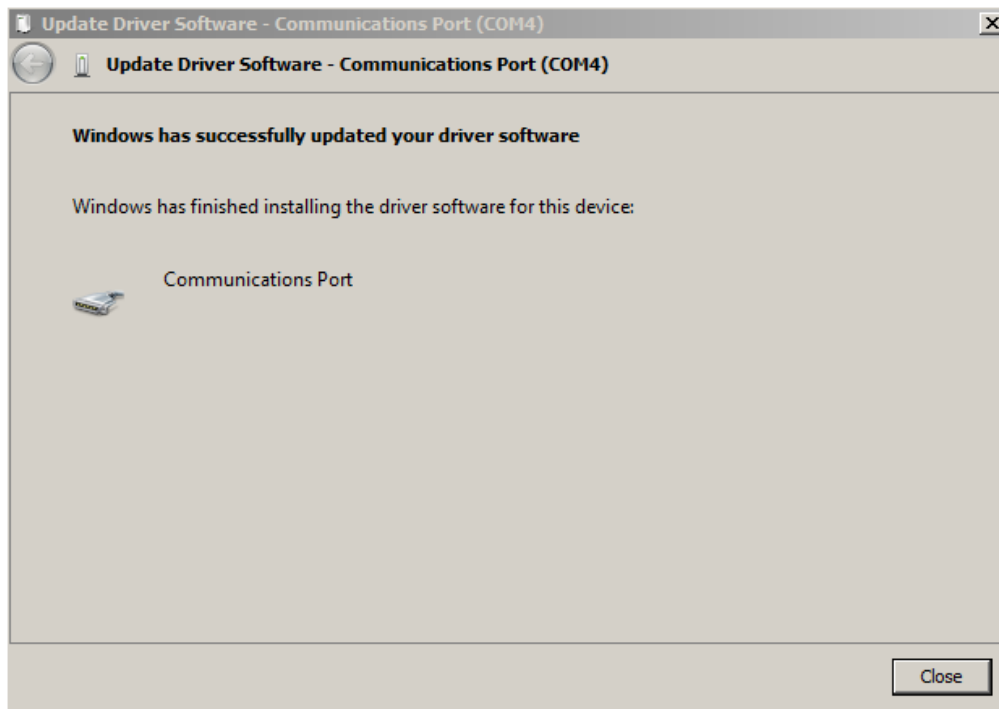


Figure 8-6 Installation completed, close and finish

The new device has automatically been added to the item **“Ports (COM & LPT)”**.

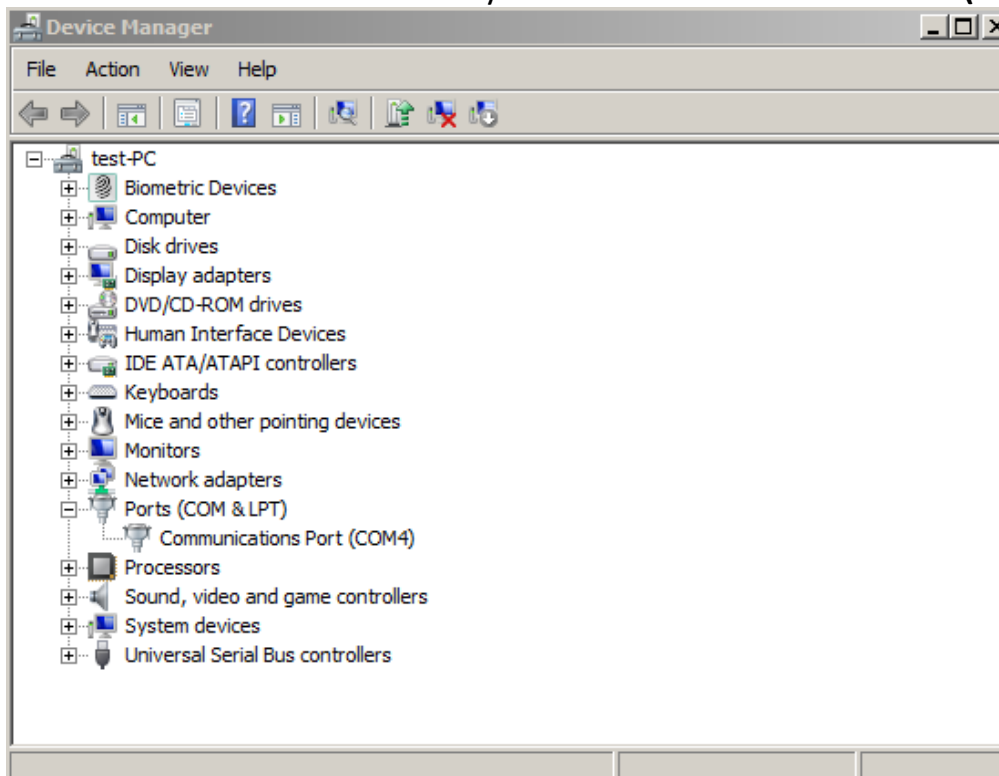


Figure 8-7 New device added to Ports (COM & LPT)

The driver installation is completed.

8.2 Windows 10

Windows 10 detects the SMC2 and configures the necessary drivers automatically. A driver installation by the user is no longer necessary.

9 Uninstall of the OS10.0

Depending on the operation system, the OS10.0 operator surface can be uninstalled via the **Windows Control Panel** (Windows 8.1 and 10) or via the **uninstall menu** (not Windows 10).




Please note:

Only the OS10.0 is uninstalled.
"User directory" are NOT deleted (see OS10.0 manual).

9.1 Uninstall via Windows Control Panel

To uninstall the OS10.0 via **Windows Control Panel**, open **Programs and Features** via **Start → System Control Panel → Programs and Features**. A list of all installed software programs will appear on the screen.

By marking the  entry with the right mouse button, one of the following options can be selected:

- „**Uninstall/change**“ and in the next window
- „**Remove the application from this computer**“.

The uninstallation starts automatically.

9.2 Uninstall via Menu

The uninstallation program  can be started directly via **All Programs → Os10.0 → Uninstall** (see figure below).

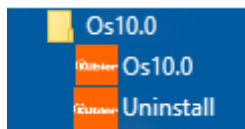


Figure 9-1 Deinstallationsmenü

The uninstallation starts automatically.

10 Appendix

10.1 Literature

[1] User manuals of the OS10

[2] User manuals of the Standard-devices (Download www.kuebler.com)

[3] System requirements for .NET Framework:

[https://msdn.microsoft.com/de-de/library/8z6watww\(v=vs.110\).aspx](https://msdn.microsoft.com/de-de/library/8z6watww(v=vs.110).aspx)

10.2 Special Cases

#	Special Case	Notice
1	Parameter UnitId	Only specific values are allowed for this parameter. Detailed information can be found in the manual of the used device [1]

Table 10-1 Special Cases

10.3 System Requirements

Operating System	Windows 8.1, 10
Hardware	<ul style="list-style-type: none">• 1-GHz processor or higher with 32 bit (x86) or 64 bit (x64)• 2 GB RAM (32-Bit) or 2 GB RAM (64 bit)• Available Storage:<ul style="list-style-type: none">- 16 GB for 32-Bit- 20 GB for 64-Bit• DirectX 9 Graphic-Engine with WDDM 1.0 driver or higher• Serial Device (classic COM Port or RS232ViaUsb adapter)
Software	<ul style="list-style-type: none">• .Net Framework 4.6.1 from Microsoft

Table 10-2 System Requirements

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