



FAG SmartUtility Light

User manual



Imprint

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1 General

The FAG SmartUtility Light software assists you with the basic management functions of the FAG SmartCheck device. With this software, you perform the basic configuration of the device, download measurement data from the device and update the firmware.

With the full version of FAG SmartUtility, you can also open the devices directly in the FAG SmartWeb software, analyse measurement data in the SmartUtility Viewer and download configurations and install them on other devices. Further information is available from your customer support representative 28.

About the FAG SmartCheck system

FAG SmartCheck is a vibration monitoring system for permanent frequency-selective monitoring. Other measurements can be captured, recorded and analysed using two integrated signals and up to three connected signals. After the analysis, the system can switch outputs and display the status using LEDs depending on user-defined alarm limits. Inputs are available, which record additional signals, to allow the device to be integrated into a superordinate system. These signals can be used as command variables for a dependent signal analysis, e.g. to initiate time or event-controlled measurement tasks.

The FAG SmartCheck device can be used to cover a wide range of applications; the SmartCheck device can be configured to meet your own requirements using the integrated web application and FAG SmartWeb software. Multiple SmartCheck devices can be combined in a network. Regardless of the number of devices, they can be managed centrally on a PC using the FAG SmartUtility Light software.

With FAG SmartCheck, Schaeffler offers status monitoring that is optimised to suit your requirements.



1.1 About this guide

This guide describes how to use the FAG SmartUtility Light software. Read this guide carefully before using the software, and store it in a safe place.

Make sure that

- This guide is available to all users
- if the product is passed on to other users, this guide is passed on with it;
- Additions and amendments provided by the manufacturer 28 are always attached to this guide.

Further information

This software is required for the operation of the FAG SmartCheck vibration monitoring system. This system also includes the FAG SmartCheck device and the web interface and FAG SmartWeb software integrated in it, which are described in their respective manuals.

Optionally, instead of the FAG SmartUtility Light software, you can purchase the FAG SmartUtility software with enhanced functionality. This is also described in a separate manual.

Definitions

- Product: the FAG SmartUtility Light software described in this manual.
- User: person or organisation with the ability to use the product

Symbols used

This symbol indicates

- Helpful additional information and
- Device settings or practical tips that will help you to perform activities more efficiently.



The damage that can occur is described here

Measures to prevent the damage are explained here.

Cross-reference symbol 5: This symbol refers to a page in the manual that provides further information. If you are reading the manual in PDF format on a screen, clicking the word to the left of the cross-reference symbol will take you straight to the section in question.

2 About this software

The FAG SmartUtility Light software is provided to you as a setup version that you need to install. You can find this version in the "FAG SmartUtility Light" program directory on the supplied CD-ROM. It automatically checks for the SmartUtility Light software requirements, such as Microsoft .NET Framework, and installs them if necessary.



Perform a software and firmware update before commissioning. You can download the latest version via the SmartUtility Light software or from the the downloads area of the SmartCheck microsite www.fag-smartcheck.com.

Functionality of the FAG SmartUtility software or FAG SmartUtility Light software

The following overview displays the functionality of the SmartUtility software or the SmartUtility Light software:

Wizards and functions	FAG SmartWeb	FAG SmartUtility	FAG SmartUtility Light
Status overview	✓	*	-
Measurement data viewer	✓	*	-
Real-time display	✓	*	-
Configuration	✓	*	-
User management	✓	✓ (User name, password)	-
Opening devices	-	✓	-
Download data	✓	✓	√
Analyse data	-	✓	-
Create report	-	✓	-
Edit device settings	-	✓	✓
Downloading the configuration	-	✓	-
Sending the configuration	-	✓	-
Updating the firmware	-	✓	✓
Opening the log file directory	-	✓	✓
Opening the default directories	-	✓	✓
Manage report templates	-	✓	-
Rescan data directory	-	✓	-
Export data	-	✓	-
Import SmartWeb data	-	1	-

* This function can be accessed via the FAG SmartUtility software.

2.1 User rights and write access

To install and operate the SmartUtility Light software, you require special access rights. Please contact your system administrator if you experience problems with the security requirements of your system.

User rights

To install the FAG SmartUtility Light software, you require administrator rights on your system.



Tip: Install the software with administrator rights and then switch back to a normal user.

Write access

The software saves settings data and log data during operation. For this reason, you require write access for the following directories for the setup version of the SmartUtility Light software:

Default directories

- Windows 7: C:\data
- 0. 10010

Log file directory

• Windows 7:

C:\Users\[User name]\AppData\Roaming\Condition Monitoring

2.2 System requirements

Your system needs to meet the following requirements for you to get the most from your FAG SmartUtility Light software:

General system requirements

Windows 7 (32/64 Bit) Service Pack 1

The system requirements recommended by Microsoft must be met as a minimum:

- Dual-core processor
- 2 GB RAM (recommended: 4 GB RAM)
- 16 GB of hard disc space available
- DirectX 9 graphics device with WDDM 1.0 driver or higher

In addition:

- Screen resolution: 1024x768 (pixels) at 96 dpi and normal font size (recommended: 1280x800 or higher)
- Disk space for software: at least 40 MB free disk space
- Mouse: three-button mouse recommended



In addition, you require disk space for the data downloaded from the SmartCheck device. This can vary considerably according to the application type and depending on your measurement tasks.

Other requirements

- Microsoft .NET Framework 4.6.1
- Standard browser: Mozilla Firefox ESR 38 (recommended), Internet Explorer 11 (Internet Explorer 9 is not recommended for performance reasons)



The SmartUtility Light software checks whether the Microsoft .Net Framework component is on the computer and installs it automatically if necessary. If you run the installation without an Internet connection, the components are set up in English by default. The SmartUtility Light software is also then fully functional.

Requirements for connection to the computer

- The UDP communication protocol must be enabled on ports 19000 and 19001 in existing firewalls in your network
- The ports must also be enabled for UDP broadcasts. This can be done in the Windows 7 firewall via **Allow unicast response**.
- If the SmartCheck device has not been assigned an address via DHCP, it will have the IP address 192.168.1.100 by default. In this case, the IP address of your computer must be within the 192.168.1.x range.

Please contact your system administrator if you experience problems with the network settings.



- If an SmartCheck device cannot be opened in the browser, clear the browser cache and try again.
- If you receive a message stating that cookies are not accepted, please allow the use of cookies or enter the IP address of the SmartCheck device as an exception.
 For further information, please see the "Introduction to network basics" section in the manual.



If you operate a larger equipment pool (e.g. more than 20 devices), we recommend that you use the FAG SmartUtility software, which features enhanced functionality. For example, you can download the configurations for one device and transfer them to other devices. Data analysis can also be carried out in the Viewer software with the full version.

2.3 Installing the software

Open the FAG SmartUtility Light program directory on the supplied CD-ROM. Double-click the following file: **SmartUtility Light.exe**. This starts a wizard, which will guide you through the individual installation steps:



This includes-depending on your system configuration-the following steps:

- **Select installation language:** Here you can select the language to be used during the installation of the SmartUtility Light software.
- **Install Microsoft .NET Framework:** If the wizard does not find these components on your computer, it will start installing them after confirmation.
- Select target directory: You can either accept the suggested directory or enter a different directory. The FAG SmartUtility Light software is saved in the following directory by default: C:\Programs\FAGSmartUtility Light.
- Select folder in Start menu: Here you have the option to change the SmartUtility Light entry in the Start menu to suit your requirements.
- **Restart computer:** In the final step of the wizard, you have the option to restart the computer immediately or to carry out the restart at another time. We recommend always restarting the computer if the DirectX or Microsoft .NET components have been installed.

Links are created in the start menu and on the desktop during the installation; these links can be used to start the FAG SmartUtility Light software. When you start the software for the first time after installation, the **Basic settings** wizard opens and guides you through the most important configurations in three steps. Details on this can be found under **First start-up** $[g^h]$.

3 First start-up

You can start the FAG SmartUtility Light software via links in the Start menu and on the desktop. During the first startup, the **Basic settings** page opens first. This page appears in the language that you selected for the installation:

FAG SmartUtility Light Basic settings		- □	×
You can edit the program's basic settings here by selecting the desired language and specifying the directory for the data. The directory mu drive. Write access is required for these directories. UNC paths and removable storage devices are not permitted. You can change the details at any time under Settings.	st be located on a lo	ical or netwo	rk
Language			
Current language: Deutsch			
Available languages:			
 Español (España, alfabetización internacional) 中文(简体) 旧版 			
Default directories			
Default directory for data:			
C\data		•	
Help	ОК	Cance	el

Here you can define the following basic configurations:

- Language: Here you can specify the language in which the user interface is displayed. Click on an available language.
- Default directories: Here you can specify the directories to be used by default for downloaded data.



- Set up the default directories of the SmartUtility Light software on a central computer that is available at all times.
 - Even if several users access the SmartUtility Light software, ensure that the data is always downloaded to the same default directory for data.

When you close the **Basic settings** page with **OK**, the SmartUtility Light software is opened directly and all functions are available. When you close the page with **Cancel**, the default settings are adopted automatically. You will then need to start the program again via links in the Start menu and on the desktop.

You can change any program settings that you specify on the **Basic settings** page at a later date under **Settings** 22.

4 The user interface at a glance

The SmartUtility Light software user interface consists of buttons that are used to open the wizards for the most important actions. In addition, you can find the **More actions** list box here, which includes additional functions and the settings for the SmartUtility Light software:



The wizards guide you through the individual steps with the aid of detailed instructions. For this reason, you will only find general information and important additional information regarding the wizards under **Wizards and functions** 1. The additional **Settings** 2, which are not wizard-supported, are described in more detail. Here you can specify important settings for SmartUtility Light.



The – button minimises the SmartUtility Light window. To exit the software, click on \times . Only exit the software after a process has been fully completed; otherwise, measurement data could be lost.

5 Wizards and functions

If you want to use the FAG SmartUtility Light software to access the FAG SmartCheck device, the following requirements must be met:

- The SmartCheck device must be started and must be in measuring mode.
- The SmartCheck device must be on the network or directly connected to your computer via Ethernet cable.
- The UDP communication protocol must be enabled on ports 19000 and 19001 in existing firewalls in your network
- If the SmartCheck device has not been assigned an address via DHCP, it will have the IP address 192.168.1.100 by default. In this case, the IP address of your computer must be within the 192.168.1.x range.

Further information can be found in the FAG SmartCheck user documentation. This documentation can be found on the supplied CD ROM.



Please contact your system administrator if you experience problems with the network settings.

Accessing the SmartCheck devices in the wizards

The name of every SmartCheck device is **FAG** SmartCheck by default. If you want to integrate multiple SmartCheck devices into your system, it is important that you give each device a unique name. You can only identify devices without a unique name in the Wizard device list is to the IP address.

Configure the name using the **Edit device settings** 16 wizard. Within the wizard, you can find your system's SmartCheck devices either in the automatically generated list 1 or by manually entering 13 the network parameters of the corresponding SmartCheck device.

If you have activated user management in the FAG SmartWeb software, you also have to specify the user name and password 2th for each SmartCheck device in the **Settings** 2th. You can find further information on user management in the FAG SmartWeb user documentation on the supplied CD-ROM.



If a device is started via the FAG SmartWeb software in the Maintenance System, you will be unable to open it using SmartUtility Light, download data or update the firmware. Devices that have been started

in the Maintenance System are marked with the alarm symbol 🔟 in the SmartUtility Light wizards. You will also receive an error message: "A communication error occurred: The operation could not be executed. Check whether the device's Maintenance System has started."

List of FAG SmartCheck devices

In the first step - the **Select devices** step - all SmartUtility Light software wizards display the SmartCheck devices found on the network:

	Alarm	Device name	IP address 🔻	Serial number	Firmware
	1	FAG SmartCheck 14	172.28.205.235	f4:3d:80:00:0d:d1	1.6.2
1	1	FAG SmartCheck 20	172.28.205.234	f4:3d:80:00:0d:d0	1.6.0
	1	FAG SmartCheck 28	172.28.205.232	f4:3d:80:00:0d:ce	1.6.1
	1	FAG SmartCheck 13	172.28.205.230	f4:3d:80:00:0d:cc	1.6.1
	1	FAG SmartCheck 12	172.28.205.229	f4:3d:80:00:08:75	< 1.6
	V	FAG SmartCheck 11	172.28.205.228	f4:3d:80:00:08:c6	1.4.43
	_	FAG SmartCheck 9	172.28.205.227	f4:3d:80:00:09:2d	1.4.33
	1	FAG SmartCheck 8	172.28.205.226	f4:3d:80:00:07:b6	1.6.1
	_	FAG SmartCheck 7	172.28.205.225	f4:3d:80:00:08:81	1.4.33
	!	FAG SmartCheck 4	172.28.205.224	f4:3d:80:00:09:91	1.6.1
	-	FAG SmartCheck 8	172.28.205.222	f4:3d:80:00:08:c2	1.6.2
	!	FAG SmartCheck 7	172.28.205.221	f4:3d:80:00:09:16	1.6.1
Shi.		4 ¥ 🔖	55 Devices	(New devices are	searched for every 120 second

The following information and functions are to be found here:

• The list columns provide information on the alarm status, name, IP address, serial number and firmware version of the individual SmartCheck devices.

- The alarm symbols show you at a glance:
 - Green: There is no alarm
 - Yellow: One or several characteristic values have triggered a pre-alarm
 - Red: One or several characteristic values have triggered a main alarm
 - White: The alarm status is still unknown, e.g. because the SmartCheck device has not yet carried out any measurements.
 - ■: The device is in the Maintenance System (maintenance mode).
- The alarm symbols are updated on a regular basis.
- You can set any column of the list as a sort criterion by clicking in the column title. Click a second time to change the sort order, i.e. from ascending to descending or vice-versa. The current sort order is displayed by the symbols
 for ascending and
 for descending.
- Sorting by column is retained, even if you close the wizard and re-open it.
- You can adjust the column width.



- If the list does not contain any entries or a device is missing, you can update the list. To do so, press the **F5** key or add the device manually (see below). If there are still no devices displayed, make sure:
 - that the device is in measuring mode and connected to the network;
 - that you are connected to the network;
 - that the settings in the SmartUtility Light software are correct.
- Manually added devices are then displayed even when unavailable. They are then highlighted in light grey.

Select FAG SmartCheck devices

In the wizards, you can select one or more SmartCheck devices for each action. To do so, activate the tick \blacksquare in front of the respective device name in the list.

Below the list, you will also find symbols to filter the selection:

Explanation
Here you can select all the devices.
Here you can deselect all the devices.
Here you can invert the selection of the devices.
Here you can select all the devices for which a pre or main alarm has been triggered. This option is only available for functions that work with files on the hard drive, such as Analyse data and Create report .
Here you can select all the devices for which a main alarm has been triggered. This option is only available for functions that work with files on the hard drive, such as Analyse data and Create report .
Here you can manually add a device via the TCP/IP address or via a UNC path.
Right-click in the area of the device list to use the options described above via the context menu: Select all devices, Deselect all devices, Invert device selection and Add device manually . There, you will also find the command Scan for new devices , with which you can update the device list:

Symbol	Explanation	Explanation						
		Alar	m Device name	IP address 🔻	Serial number	Firmware		*
			FAG SmartCheck 14	172.28.205.235	f4:3d:80:00:0d:d1	1.6.2		
		V 🚺	FAG SmartCheck 20	172.28.205.234	f4:3d:80:00:0d:d0	1.6.0		
			FAG SmartCheck 28	172.28.20	Select all devices		Ctrl + A	
			FAG SmartCheck 13	172.28.20	Deselect all devices		Ctrl + D	
			FAG SmartCheck 12	172.28.20	Invert device select	on	Ctrl + I	
			FAG SmartCheck 11	172.28.20	Add device manual	hy .	Ctrl + S	
			FAG SmartCheck 9	172.28.20		·	F5	
			FAG SmartCheck 8	172.28.20	Scan for new device	:5	5	
			FAG SmartCheck 7	172.28.205.225	f4:3d:80:00:08:81	1.4.33		
			FAG SmartCheck 4	172.28.205.224	f4:3d:80:00:09:91	1.6.1		
			FAG SmartCheck 8	172.28.205.222	f4:3d:80:00:08:c2	1.6.2		
			FAG SmartCheck 7	172.28.205.221	f4:3d:80:00:09:16	1.6.1		-

	The follo	wing hotkeys can also be used for the options described above:
8	Ctrl+A	Select all devices
· ·	Ctrl+D	Deselect all devices
	Ctrl+I	Invert device selection
	Ctrl+S	Add device manually

Scan for new devices

Updating the device list

F5

The list of SmartCheck devices is updated automatically within a specified search interval. You can adjust this in the Settings 23. You can also update the list by pressing the **F5** key.

Add device manually

This function is particularly important if a SmartCheck device cannot be found via UDP. A possible reason for this is that the device is behind a router. The TCP protocol is used to find manually added devices for the device list. If a proxy has been entered in Internet Options on the Control Panel, this will also be used.

To add a device manually, click ¹ in the **Select device** step:

FAG SmartUtility Light × Add device manually							
Enter an IP address or a UNC path as well as the port number and login information of the device. Then check the connection to the device.							
Add device manually							
Address:	172.28.205.234						
Port number:	80 🗘						
	Use default user and password						
User name:	admin						
Password:	•••••						
	Verify						
Device information	Device information						
Serial number:							
Device name:							
Help	OK Cancel						

Here you have the following options:

• Enter the **address** (IP address or UNC path) and the relevant **port number** of the SmartCheck device.

- If the device is password-protected, specify the **user name** and **password**.
- You can also activate the Use default user and password option to log on with your user data.
- Click Verify to test the connection to the SmartCheck device.

As soon as the connection to the device has been established, the **serial number** and **device name** are displayed. Manually input devices are retained in the SmartUtility Light software and are also available in the other wizards of the same software.

If you no longer need to use a device, you can remove it from the device list. Further information on this can be found in the Settings 25 section.



Further information on the password protection of SmartCheck devices can be found in the **User management** chapter in the FAG SmartWeb user documentation.

5.1 Download data

With this wizard, you can download the measurement data from the FAG SmartCheck devices. Proceed as follows: **Step 1:**

Select the required SmartCheck device or devices from which you want to download the data.

Step 2:

Next, determine the time range for which the data is to be downloaded. Also specify the save location and format for the data:

FAG SmartUtility Light Download data		×
1. Select devices	Configure downloading	
2. Configure downloading	Time range	
3. Download data	 Complete time range Specify time range: From: To: 5/24/2015 6/24/2015 6/24/2015 6/24/2015 6/24/2015 6/24/2015 5/24/2015 5/24/201	
Specify the basic download settings. These include the time range, the save location and the format of the downloaded measurement data. Here you can also specify that the analysis should be started immediately.	More actions Download data for analysis in SmartUtility Viewer. Download raw data only. (The function 'Rescan data directory' can be performed at another time.)	
Help	Back Next Finish Cancel	

Here you have the following options:

Time range

This is where you determine the time range for which the measurement data is to be downloaded:

- Complete time range: All measurement data is downloaded.
- **Set time range:** Only the measurement data for the selected time range is downloaded. If you activate this option, the default setting is one month (i.e. the measurement data for the past month up to today is downloaded). You can enter the dates for your desired time range in the **From** and **To** fields or

select the dates from the calendar. Here you determine the directory in which the measurement data is to be saved. Storage location You have the following options: • The list shows the default directory for data by default. This directory is specified either when you first launch the software or subsequently under **More actions** > Settings > General 22. • Click — to select another directory and specify this as the save location. • In the selected directory, a subdirectory is automatically and additionally created with the serial number of the appropriate SmartCheck device for the data. If you also wish to sort by time stamp, activate the Save data in a directory with a separate time stamp option. The time stamp directory appears in the directory tree one level above the serial number directory. • Finally, you will find a directory path that matches your settings. This path is updated directly each time the settings are changed. The terms time stamp and serial number are simply used here as placeholders and will be replaced by the actual values.

Step 3:

The data is downloaded. Wait until the process is fully completed.

CAUTION

Cancelling the process prematurely may result in the loss of data!

If you cancel the process, all the saved measurement data and trends may be damaged.

Conversion of the measurement data into another format and calculation of the trends can take some time, depending on the configuration. Always wait until the process is finished. If you cancel the process prematurely, all the measurement data collected until that point may be damaged. This measurement data can then no longer be analysed in the SmartUtility Viewer.

Result:

As soon as the action is completed, you will receive a corresponding status message. The dialogue looks like this:

FAG SmartUtility Light Download data						×
1. Select devices	Download data					
2. Configure downloading	Device name	IP address Serial number	Result			
3. Download data	FAG SmartCheck 60	172.28.205.60 f4:3d:80:00:07:55	Successful			
	FAG SmartCheck 13					
	FAG SmartCheck 23	172.28.205.23 f4:3d:80:00:0d:ce	Successful			
Downloading the data. You will receive a status message as soon as the action is completed.						
Help			Back	Finish	Cance	

The downloaded measurement data can be found in the Default directory for data 22 in the SmartUtility Light software or in the directory that you specified in **Step 2**. An individual subdirectory is created for each SmartCheck device. The name of this subdirectory is the serial number of the device.



If you want to burn the downloaded measurement data onto a CD ROM or DVD, you will need to compress the data beforehand.

5.2 Edit device settings

With this wizard, you can specify the DHCP mode and associated settings for the SmartCheck device. Proceed as follows: **Step 1:**

Select the required SmartCheck device for which you want to specify the settings.

Step 2:

In the second step, you can specify the required settings and send them to the SmartCheck device.

FAG SmartUtility Light Edit device settings				×
Edit device settings 1. Select device 2. Edit device settings 3. Transferring device settings Edit the device settings for the selected device. The settings include the network parameters and the device name for example.	Edit device settings DHCP mode: DHCP dient mode (load host name from server) IP address: 192 . 168 . 1 . 100 Netmask: 255 . 255 . 0 Gateway: 0 . 0 . 0 . 0 Host name: FAGSmartCheck Device name: FAG SmartCheck			
Help		Back Next	Cancel	

Here you have the following options:

No DHCP	With this option, you can specify the IP address or continue to use the SmartCheck device's default IP address. If No DHCP is activated, you must also specify the other settings in this step, e.g. IP address, netmask or host name .			
DHCP client mode (load host name from server)	With this option, the SmartCheck device automatically receives an IP address within your network. The device name is specified via the network's DNS server (reverse DNS).			
DHCP client mode (send host name to server)	With this option, the SmartCheck device automatically receives an IP address within your network. The device name is registered by the SmartCheck device in the network's DNS server.			
Device name	Here you can alter the device name of the SmartCheck device. Give each device a unique name, so that you can find it again straight away in the list boxes.			
	address is allocated automatically via DHCP, the SmartCheck device can only be I via the automatically allocated IP address. You can no longer use the default IP			
multiple unique n	ne of every SmartCheck device is FAG SmartCheck by default. If you want to integrate SmartCheck devices into your system, it is important that you give each device a name. Otherwise, you can only identify the devices in the wizard lists via the IP or the serial number.			
	nanagement is activated on the SmartCheck device, you must also enter a username sword $\boxed{29}$ in SmartUtility. If these are not entered, the device settings will not be ed.			

Result:

In the third step, you can check the result of the action.

5.3 Updating the firmware

With this wizard, you can send a file with a firmware update to one or more SmartCheck devices. More detailed information on firmware updates and the corresponding notifications is set out in your service or maintenance contract.



Measurement data and configurations may be irretrievably deleted!

If you update the firmware of a FAG SmartCheck device, depending on the update version, you may lose all the measurement data and configurations saved on the device. Note the following:

- When changing from version 1.2 to a higher version, all measurement data and configurations are lost.
- When changing from version 1.4 or 1.6 to a higher version, all measurement data is lost.
- From versions 1.4.27 and 1.6.6, configurations are usually retained.
- Measurement data and configurations are not retained until version 1.10

Before updating firmware, download the measurement data with the SmartUtility Light software if required. In addition, you can download the configuration (with the taught alarm limits) for the SmartCheck device via the SmartUtility software and install it again after the firmware update.

If the configurations and alarm limits must not be deleted during a firmware update, use the SmartUtility software.

Values in alarm maps with a completed learning mode may be lost!

If you have started the learning mode for the SmartCheck device in conjunction with one or two other signals, the associated alarm maps are populated gradually during the learning process. A firmware update has the following effects:

- All alarm maps are reset to the **Use learning mode** status, regardless of whether the learning mode was already completed in a map.
- Learning mode is deactivated and the outstanding maps remain unchanged.
- If you re-activate learning mode, it restarts for all maps. You also lose the values that have already been taught-in.

To back up the values in the alarm maps with a completed learning mode, proceed as follows:

1. Manually deactivate the **Use learning mode** option for each completed alarm map. You can find this option in the configuration wizards for the SmartWeb software.

2. Activate the learning mode only at this point.

For more information about the learning mode, please see the section entitled **Learning mode and alarm maps** in the manual for the SmartWeb software.



The update to version 1.10 is also associated with a migration. Due to the migration, you cannot downgrade from 1.10 to a previous version. All future firmware versions will also be based on this update with migration. This means, for example, that you can no longer update from version 1.6.20 directly to a future version 1.12. You must always install version 1.10 first.

To send a firmware update, proceed as follows:

Step 1:

Select the required SmartCheck device or devices whose firmware you want to update.

Step 2:

Specify the file with the firmware update; the file has the ending **SF1**. Once you have selected a file, you will find the version number and the device type for this firmware file in the **Information** section.

FAG SmartUtility Light Update firmware						×
1. Select devices	Select firmware file					_
2. Select firmware file	Firmware:					
	N:\IU-HZR-I\ID\Software\T	est\SmartCheck\Firmware\1.7.x\Aktuelle version\sma	rtcheck-at91.sf1		•	
 Check compatibility Send firmware 						
4. Send firmware	Information					
		1.7.5.smc-at91-1.7.5.389258-20150126110421				
	Device type:	SmartCheck				
Select the file containing the SmartCheck firmware update.						
Help	JI		Back	Next	Cancel	

Step 3:

This step checks which firmware is present on the selected devices. You are then presented with an overview of the verification result:

FAG SmartUtility Light Update firmware						×
1. Select devices	Check compatibilit	у				
	Compatibility	Device name	IP address	Serial number	Result	
2. Select firmware file		FAG SmartCheck	172.28.205.60	f4:3d:80:00:06:46	Update possible.	
3. Check compatibility	Image:	FAG SmartCheck	172.28.205.17	f4:3d:80:00:04:1e	Update possible.	
4. Send firmware		FAG SmartCheck	172.28.205.96	f4:3d:80:00:08:84	Update possible. Note: firmware version 1.6.6.6051 is already installed on the device.	
The test overview provides information about which devices the firmware can be updated on and on which devices this is not possible. Always observe the messages under "Result": here you can find details about the test such as the current firmware version number.						
Help					Back Next Cancel	

You can find the following information here:

You can find the follo	owing information here:
•	This symbol indicates devices whose firmware can be updated with the selected firmware version. These devices are already ticked.
	The following requirement is needed for this status:
	• The firmware version of the device is lower than the selected firmware version.
	Details on this can be found in the Result column.
!	This symbol indicates devices whose firmware can be updated with the selected firmware version. The checkmark is not yet activated for this status as the update could have undesired effects under certain circumstances.
	For this status you will receive a detailed explanation of the verification result. You should not activate the checkmark until you have read this explanation and have been notified of the possible effects of the update.
	• The firmware version of the device is identical to the selected firmware version.
	• The firmware version of the device could not be read and it is not certain whether it is compatible with the selected firmware version. If you perform the update, it is possible that the device will reset to the factory firmware version.
	• For updates prior to version 1.10: The firmware version of the device could not be read but the device version is compatible with the selected firmware version. It is possible that you may not be able to re-use the device configurations following the update.
	• The firmware version of the device is higher than the selected firmware version. The updat will downgrade the device firmware version to the lower version. The configurations will be lost in this case, as only upwards compatibility is guaranteed.
	Details on this can be found in the Result column.
0	This symbol indicates devices whose firmware cannot be updated with the selected firmware version. You cannot tick these devices.
	The update may be blocked for the following reasons:
	• The selected firmware version is lower than the factory firmware for the device.
	• The selected firmware version is not compatible with the device version.
	The selected firmware version is unknown.
	The version of SmartUtility Light is too low.
	• The firmware version of the device is too low and cannot be updated in a single step. You must first update the device with a lower firmware version.
	• The firmware version of the device is version 1.10 or above. In this case, it is no longer possible to import a lower version.
	A communication error occurred.
	• Device login failed. You may have activated user management in SmartWeb.
	Details on this can be found in the Result column.
Device name, IP address, Serial number	This information identifies the SmartCheck device for the line in question.
Result	Here you can find detailed information on the verification result. This information tells you whe the firmware can - or cannot - be updated.

Step 4:

Click **Next** to send the firmware to the selected SmartCheck devices and wait until the process is fully completed.



The factory firmware is the firmware originally supplied with the device. The version of the new firmware cannot be lower than the factory firmware version; updating in this case will not be possible. The system reverts to the factory firmware if required, e.g. if the update fails.

Result:

After the firmware is updated, the FAG SmartCheck device is unavailable for a time, as a safety mechanism is being run. This mechanism ensures that your device is functioning properly again after the firmware update. The duration of

unavailability depends on the result of this check:

- If your device with the new firmware is functioning properly, the SmartCheck device will be available again after approx. 6–7 minutes.
- If this is not the case, the old firmware will automatically be reinstalled. It will then take approx. 20 minutes until the device is available again.



For updates to firmware versions before version 1.10, please empty the browser cache after the update. This is necessary to ensure that the latest version of the FAG SmartWeb software is loaded in your browser.

Checking the firmware version on the SmartCheck device

You can see which version of the firmware is set up on your FAG SmartWeb device in the SmartCheck software. To do this, proceed as follows:

- 1. Enter the IP address of the SmartCheck device in a browser. The SmartWeb software is started.
- 2. In the SmartWeb software menu bar, click on Help.

3. Select Version.

Here you can find detailed information on the version of the SmartCheck device, including the device ID and serial number.

5.4 Opening the log file directory

Click on **More actions > Open log file directory** to open the directory in which SmartUtility deposits the log files. Depending on the Windows version installed on your system, this directory is located by default under:

- Windows 7:
- C:\Users\[User name]\AppData\Roaming\Condition Monitoring

All software system messages and information on processes are recorded in the log files. You can open a log file with a text editor or word processor.

5.5 Opening the default directories

Click on **More actions > Open default directory for data** to open the directory in which the SmartUtility Light software saves/searches for downloaded data. Depending on the Windows version installed on your system, these directories are located by default under:

• Windows 7: C:\data

You can change the default directories in **Settings > General** 22 or **Settings > Report** 22.



Make sure that the downloaded data is always saved to the default directory for data. If you want to specify your own directory, make sure that all the data is available in this directory.

6 Settings

Default settings can be found under **More actions** > **Settings**. You can use these settings to adapt the SmartUtility Light software to suit your requirements. Click on a term on the left in order to specify the settings in the area on the right. You must confirm all changes by clicking **OK**:

FAG SmartUtility Light Settings	□ ×
General	General
-	General Vou can select the default directory for data here and activate or deactivate messages. Default directory Default directory for data: C:\data Messages The software provides you with information at various points using automatic messages. You can switch off these automatic messages individually by selecting the "Do not show this message again" option. Click here to reactivate all automatic messages. Show all messages
Help	OK Cancel

Here you have the following options:

General

Default directories

Here you can change the default directories. These are used by the SmartUtility Light software for downloaded data and are automatically created during installation at the following path:

- Windows 7:
- C:\data

Click click

ault directory	
fault directory for data:	
\data 🔹 🔹	
	_



Make sure that the downloaded data is always saved to the default directory. If you want to specify your own directory, make sure that all the data is available in this directory.

Messages

The SmartUtility Light software recognises various types of messages, e.g. warnings, general information and regular messages regarding updates. You can usually activate the **Do not show this message again** option in these messages so that the message no longer appears.

You can revert this change in the **Settings > Messages** section. Click **Show all messages** to view all warnings, information and other messages again.

Messages The software provides you with information at various points using automatic messages. You can switch off these automatic messages individually by selecting the "Do not show this message again" option. Click here to reactivate all automatic messages.
ndividually by selecting the "Do not show this message again" option.
Show all messages

Language

Here you can set the language in which the SmartUtility Light software interface is displayed. Click on an available language:

Current	language:
📲 Er	nglish
Availabl	e languages:
💻 De	eutsch
📲 En	glish
📕 fra	ançais (France)
s Es	pañol (España, alfabetización internacional)
四 中	文(简体) 旧版

The following languages are available:

Sprache	Language	Idioma	Langue	Hànyu
Deutsch (German)	English (English)	Español (Spanish)	Français (French)	中文 (Chinese)

Communication

UDP ports

Here you can set the UDP port that is used to search for your devices and for configuration. In addition, with the option **Interval for the sensor search via UDP** you can determine the frequency at which the SmartUtility Light software is to search for devices and update the corresponding list with SmartCheck devices in the wizards.

1	UDP ports
-	
	UDP communication port for device search:
	19000 🙄
	120 Seconds
	UDP communication port for device search: 19000 Interval for the sensor search via UDP: 120 Seconds

By default, the UDP port is set to 19000 for the device search. The search interval is set to 120 seconds.



The following basic prerequisites apply for connecting to the computer:

- The UDP communication protocol must be enabled on the used port 19000 in existing firewalls.
- If the SmartCheck device has not been assigned an address via DHCP, it will have the IP address 192.168.1.100 by default. In this case, the IP address of your computer must be within the 192.168.1.x range.
- During the initial installation of the SmartUtility Light software, the setting for the UDP port is made automatically. These automatic settings are generally correct.

If there are any problems, please contact your system administrator.

Maximum number of parallel device connections

If you have selected multiple devices for a task inSmartUtility Light, some tasks may be processed in parallel on multiple devices. For some jobs, there are a maximum number of parallel device connections with preset standard values. You can change the standard values here and adjust the performance of your network environment:

- Downloading data: By default, you can download data from 1 device.
- **Update firmware:** By default, you can update the firmware of 20 devices at the same time. You can increase this value to a maximum of 30 devices.

Maximum number of	of selected devices
"Download data" v 1 ‡	
"Update firmware"	

Updates

You can set the SmartUtility Light software to automatically search for updates for the SmartUtility Light software and the SmartCheck device. To do so, set the intervals at which you want the system to search for new updates. If you want to deactivate the update test, select **Never**:

Updates	
Check for updates on starting software:	
Weekly	
Use proxy server	
IP/server name:	
Port:	
8080 🌻	
Show message if connection to page with version information is not p Check for updates now	ossible.

You can also set a message to display if the SmartUtility Light software fails to access the website with the update information.

The **Check for updates now** button allows you to search for updates outside of a regular check. The following dialogue appears:

rmware update found				
New firmware version 1.	6.12 available:			
•	e/content.schaeffler.de/de/	/mediathek/library/libra	ry-detail-language.jsp?id=3548801	 _
evices to be updated				 _
Name	Serial number		Version	
SW 21	f4:3d:80:00:18:ce	1.6.10		
FAG SmartCheck 10	f4:3d:80:00:10:07	< 1.6		
FAG SmartCheck 11	f4:3d:80:00:11:c4	< 1.6		
FAG SmartCheck 68	f4:3d:80:00:13:68	< 1.6		
FAG SmartCheck 13	f4:3d:80:00:13:4d	1.6.10		
FAG SmartCheck 80	f4:3d:80:00:1c:ed	< 1.6		
FAG SmartCheck 18	f4:3d:80:00:18:6f	< 1.6		
FAG SmartCheck 14	f4:3d:80:00:14:2f	1.6.10		
FAG SmartCheck 81	f4:3d:80:00:0b:81	1.6.6		
pdates				
nterval:				
Weekly	-			

The following information and functions are to be found here:

- The first section of the dialogue contains information on whether any updates were found and where you can download them.
- The **Updates** section provides you once again with the selection list in which you can determine the frequency at which the system should search for updates.



If you are using a proxy server between the browser and the Internet in your company network, please activate **Use proxy server** and enter the address and port number of the proxy server. Please contact your system administrator for more detailed information about proxy settings.

User name/password

Here you can change the user name and password for every SmartCheck device that the SmartUtility Light software finds. Select the required device in the **Select devices** list. This list contains all the SmartCheck devices that have ever been detected. The IP address is displayed if the device is available or has been added manually. Enter the user name and password, and then repeat the password to confirm:

User name/password	
Select device:	
FAG SmartCheck 172.28.205.16	52 f4:3d:80:00:15:31 🔹 🗙
User name:	
admin	
Password:	
•••••	Show password as plain text
Repeat password:	
•••••	
Reset]



You can log in automatically to a SmartCheck device or the integrated SmartWeb software using the user name and password. To do so, your details here must match the user name and password stored in the SmartWeb software user management. If this is not the case, you will not be logged in automatically. You will have to log in using the user name and password stored in the SmartWeb software.

Deleting devices

Manually entered devices remain stored in the SmartUtility Light software. If you no longer need to use a device, you can remove it from the device list. Select the required device from the **Select device** list and click on \times .

7 Further information

Information on support and the current program version can be found under **More actions > Info**:

FAG SmartUtility Light	×
MM	FAG SmartUtility Light Version : 1.10
FAG Industrial Services GmbH Website : www.schaeffler.com/services General queries Telephone : +49 (0) 2407 9149-66 Email : industrial-services@schaeffler.com Technical support Telephone : +49 (0) 2407 9149-99 Email : support.is@schaeffler.com System info DirectX info	
	© 2015 FAG Industrial Services GmbH SCHAEFFLER

Here you have the following options:

- Version: Here you can view the current version of your SmartUtility Light software
- Website: Click this link to switch to the Schaeffler Industrial Services website.
- Email: Click this link to email a general query to Schaeffler Industrial Services.
- System info: Click this button to switch directly to the System information page of your Windows system.
- DirectX info: Click this button to switch directly to the DirectX diagnostic program.

Information and services relating to FAG SmartCheck

We offer a unique range of services for FAG SmartCheck — from training courses, technical mentoring during the induction phase and expert support with diagnostic issues, right through to customised service agreements including remote monitoring and reporting.

A selection of our comprehensive range of products and services for FAG SmartCheck can be found on the Internet at www.FAG-SmartCheck.com.

8 Manufacturer/support

Manufacturer

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Website: www.schaeffler.com/services Further information: www.FAG-SmartCheck.com Contact: industrial-services@schaeffler.com

Please send all correspondence directly to FAG Industrial Services GmbH!

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Support

Tel.: +49 (0) 2407 9149 99 Email: support.is@schaeffler.com We provide support services for the FAG SmartCheck device and related software products. A detailed description of the type and scope of the support services we provide can be found online at www.FAG-SmartCheck.com.

