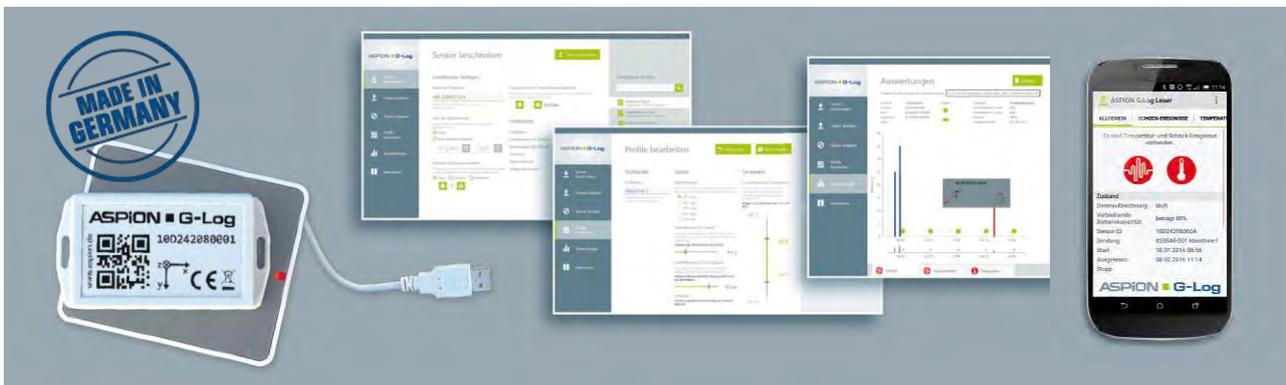


Recording shocks and temperature during transport

Wireless, inexpensive, long lasting



## User manual

Find updates, FAQs and more useful information  
online in our ASPION customer portal at

[www.aspion.de](http://www.aspion.de)



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# ASPION G-Log shock sensor

## 0. General product description

With the ASPION G-Log shock sensor, you can record shocks, vibrations and temperature data. It offers a 3-axes accelerometer and an integrated temperature sensor. The sensor only saves measured values above or below a defined threshold. You can reuse the sensor a number of times and for different transports.

Using the ASPION G-Log Manager computer software, you can define thresholds and transfer them to the ASPION G-Log shock sensor. When reading out data from the sensor, the software displays the measured values. Data is transferred wirelessly to and from the sensor using Near Field Communication (NFC) technology and a card reader which is connected via a USB interface to the computer. To easily read out data or to stop a sensor you can download the ASPION G-Log app for smartphones (Android Version 4.1 and later) from the Google Play Store. Data is easily sent from the app to your software via e-mail. The ASPION G-Log Manager computer software then quickly analyses and further processes your data.

Each sensor has a unique ID which can be found on the housing and in the barcode.

**The shock sensor is available in two versions:**

ASPION G-Log: housing with protection type IP 50; battery can be replaced by the manufacturer

ASPION G-Log Waterproof: waterproof version with encapsulation for outdoor use – housing with protection type IP 65; battery not replaceable



ASPION G-Log shock sensor



USB card reader



ASPION G-Log Manager PC software on USB stick



PC software ASPION G-Log Manager for Windows 7 and later



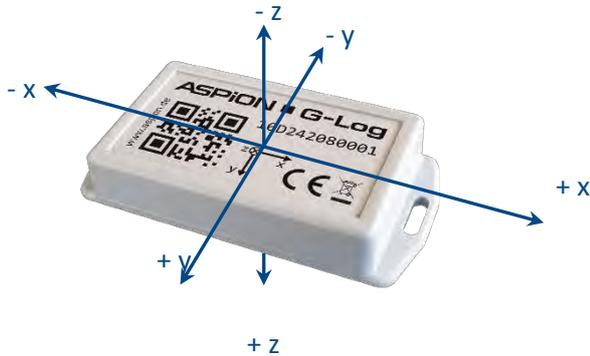
App for smartphones for Android Version 4.1 and later

1. Technical data

	Description	Details
<b>Accelerometer</b>	3 axes: x, y and z	<ul style="list-style-type: none"> <li>Up to ±16 g, extendable up to ±24 g (not calibrated for values betw. ±16 g and ±24 g)</li> <li>Accuracy: 2.5%</li> <li>Shock values verified by an accredited testing facility</li> </ul>
	Measuring frequency	<ul style="list-style-type: none"> <li>Adjustable threshold from 2 g to 12 g</li> <li>Between 25 Hz and 400 Hz</li> </ul>
<b>Temperature sensor</b>	Internal	<ul style="list-style-type: none"> <li>-30°C ... +60°C with accuracy of ± 2°C</li> <li>1°C resolution</li> <li>Lower and upper threshold freely definable</li> </ul>
<b>Memory/logging</b>	Non-volatile memory Event triggered	<ul style="list-style-type: none"> <li>Capacity: 286 events in circular buffers</li> <li>Saves first and 8 highest peak events with details permanently</li> <li>Data logging if values are above or below the threshold</li> </ul>
<b>Data transfer and analysis</b>	Wireless via NFC with PC software and App	<ul style="list-style-type: none"> <li>Data is transferred to sensor via NFC and can then be analyzed</li> <li>Configuration and analysis with PC software and NFC-enabled reading devices</li> </ul>
<b>Near Field Communication (NFC)</b>	NFC Tag (Type 4)	<ul style="list-style-type: none"> <li>ISO/IEC 14443B compatible</li> <li>13.56 MHz RF interface</li> </ul>
<b>Battery</b>	CR2032 3V Lithium 225 mAh battery exchange by manufacturer (only for standard, not valid for Waterproof version)	<ul style="list-style-type: none"> <li>Battery life depends on data rate; up to 1.5 years; e.g. 1 year/100 Hz or 450 days/50 Hz</li> <li>Battery power level at delivery: full</li> <li>Battery consumption at delivery condition: 5% per year for indicated storage conditions</li> </ul>
<b>Temperature ranges/Storage</b>	Operating temperature Storage temperature	<ul style="list-style-type: none"> <li>-30°C ... +60°C</li> <li>5°C ... +40°C</li> <li>Humidity: max. 85%</li> </ul>
<b>Housing + Mounting</b>	ABS housing; screw mounting M3 ISO 7380 FL; optional fixing with industrial adhesive tape	<ul style="list-style-type: none"> <li>Dimensions: 88 mm x 45 mm x 16 mm</li> <li>Distance of mounting holes: 80 mm</li> <li>Maximum tightening torque: 0,4 - 0,5 Nm</li> <li>Penetration of fluids is to be prevented (Corrosion damage/short circuit)</li> </ul>
<b>Versions</b>	Standard, enclosure type of protection IP 50	<ul style="list-style-type: none"> <li>Weight: approx. 35 g</li> <li>Penetration of fluids is to be prevented (Corrosion damage/short circuit)</li> </ul>
	Waterproof, enclosure type of protection IP 65	<ul style="list-style-type: none"> <li>Weight: approx. 50 g, dust- and waterproof</li> </ul>
<b>Approvals/Standards</b>	EC Declaration of Conformity	<ul style="list-style-type: none"> <li>R&amp;TTE Directive 1999/5/EG</li> <li>ROHS Directive 2011/65/EU and WEEE</li> </ul>

## 2. Mounting

### 2.1 Mounting orientation



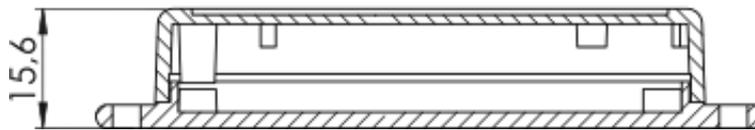
To correctly assign the axes in case of shock events, the mounting orientation is critical.

#### Recommended mounting

- On steel: M3 ISO 7380 FL
- On wood/sheet metal: flathead screws with a maximum thread diameter of 3.5 mm (e.g. DIN 7981)
- Maximum tightening torque: 0.4 – 0.5 Nm

### 2.2 Housing dimensions and mounting template

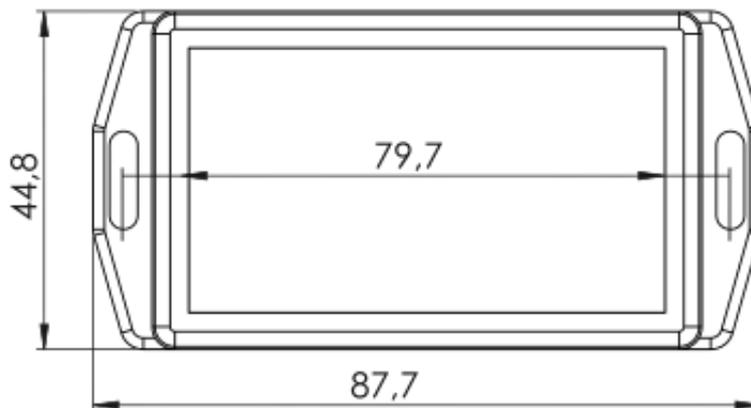
#### Housing cross section



Dimensions in millimeters

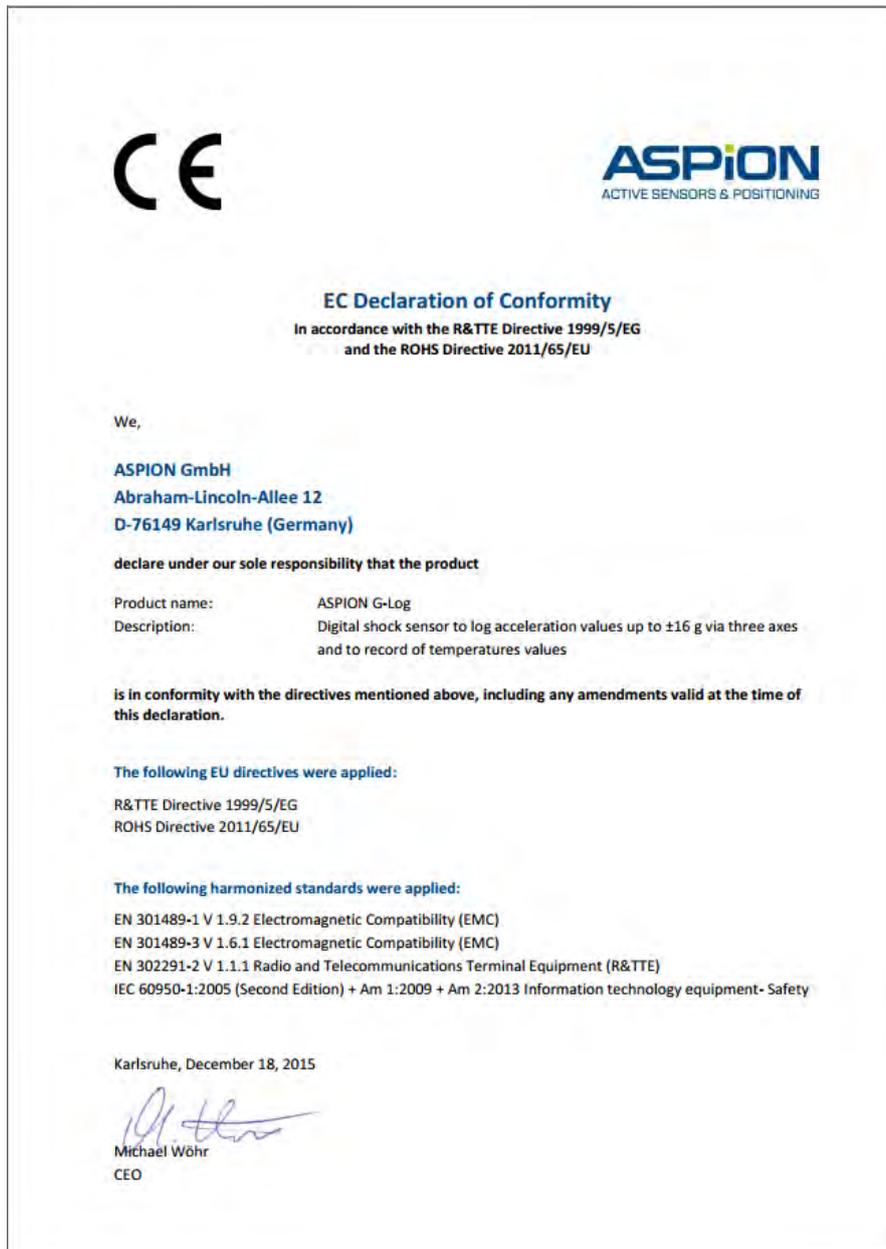
#### Housing dimensions

To easily mount the sensor, copy this mounting template (scale: 1:1).



Dimensions in millimeters

**3. Declaration of Conformity**



Conformity instructions for Canada in their original wording from “Radio Standards Specification, Issue 4”:

This device complies with Industry Canada’s licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

#### 4. Disposal



To comply with the European WEEE directive, the ASPION G-Log shock sensor must not be disposed of together with domestic waste. Please take the sensor to a municipal e-waste recycling center or send it back to your supplier.

#### 5. Card reader (NFC)

To operate the ASPION G-Log shock sensor, you require a card reader with NFC technology. ASPION recommends to use the following device or provides this device with delivery: Identiv uTrust 3700 F of Identiv Inc. You find a description on how to install this card reader in this user manual. If you use a different card reader, please contact your supplier or the respective manufacturer.

#### 6. Security notes

- The ASPION G-Log shock sensor is not designed for safety-relevant applications.
- A sensor which is visibly damaged must not be operated. Please return sensors which do not operate correctly or are damaged to your provider.
- Prevent fluids from penetrating the device, as they may cause corrosion damage or short circuit.
- The ASPION G-Log shock sensor must not be opened or modified, nor the battery exchanged. The battery can be changed by the manufacturer (not valid for the Waterproof version).
- Never use a sensor with leaking battery. Do avoid touching this sensor with your bare hands. If you had contact to leaking fluids, thoroughly wash your hands. Make sure to remove the remaining electrolyte using a damp cloth. Wash contaminated clothing that has come into contact with the electrolyte.
- The manufacturer does not assume any liability for damages which were caused due to inappropriate use or wrong operation.
- The product fulfills the requirements of the IEC 60950-1-2005 (second edition) + A1:2009 + A2:20013 Information technology equipment – safety.

## ASPION G-Log Manager – PC software

### 1. System requirements

Please note the following system requirements for your PC system:

- Windows operating system Version 7, 8.x or 100
- Monitor with at least 1600 pixels horizontal resolution
- .NET Framework V4.5 or later
- USB connectivity for Identiv uTrust 3700 F card reader (if supplied)

### 2. Installation

The required files and programs to set up the software are stored on the ASPION USB stick. Connect it to your USB slot. For the latest software versions and updates, additional product information and FAQs, please go to our **internal ASPION customer portal**, at [www.aspion.de](http://www.aspion.de).

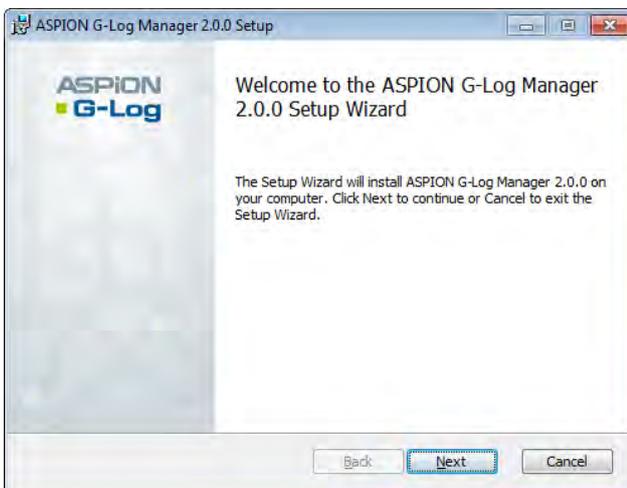
**Please note:** You require administrator rights to install the software. Please contact your IT if necessary.

#### 2.1 Getting ready for installation: .NET framework and card reader

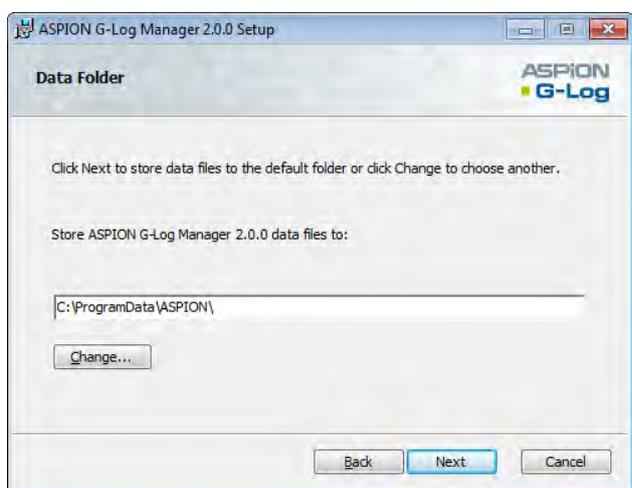
- If the .NET framework is not set up on your computer, you must first install it:  
Double-click the dotNET Framework\NDP452-KB2901907-x86-x64-AllOS-ENU.exe file to execute it
- Install the driver for the Identiv uTrust 3700 F card reader (if in use)  
Double click the Smart Card Reader\Identiv uTrust V1.17.exe file to execute it  
Connect then the card reader to the USB interface

#### 2.2 Installing the ASPION G-Log Manager PC software

- Installing ASPION G-Log Manager in German:  
Double-click the ASPION\_G-Log\_Manager\_Installer.x86.de-DE file to execute it
- Installing ASPION G-Log Manager in English:  
Double-click the ASPION\_G-Log\_Manager\_Installer.x86.en-US file to execute it
- The Setup Wizard opens. Please follow the steps of the wizard.



Starting the setup wizard.



You can define any data directory.

**Please note:** you can store data of the ASPION G-Log Manager in a directory you have selected (e.g. local directory, network directory, Cloud storage). The program will access the specified directory to display profile data and analyze data. In that way, you can share saved profiles and analyses. **Important:** make sure you have write permission to this directory.

After you have successfully installed the software, ASPION G-Log Manager is displayed as link on your desktop. Start the program with a double click. The program automatically starts with the **Write sensor** function.

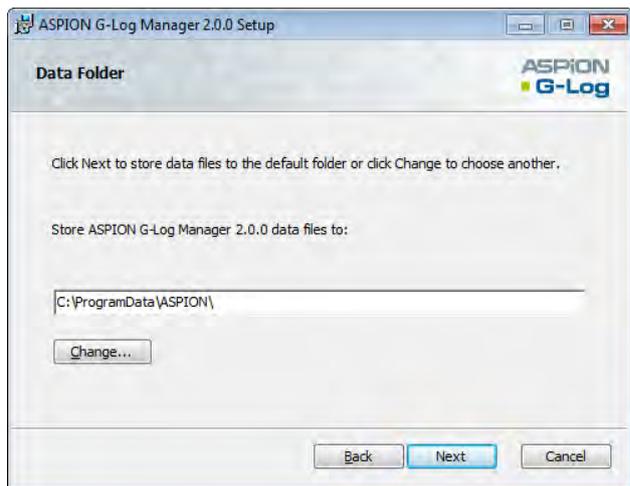
### 2.3 Installing updates

To install an update, follow the same steps as when installing the software for the first time, see ASPION G-Log Manager – PC software, chapter 2.2, “Installing the ASPION G-Log Manager PC software“. The update software automatically recognizes previously installed versions.

You can still work with data you have saved before, for example, saved profiles or analyses. Just select the same storage location for your data that you have used before. In this way, you ensure that all previously created data is still available to you.



Starting the setup wizard for updates.



During update, select the same directory to store data. In this way, all previously stored data will be available to you.

### 2.4 Deinstalling the software

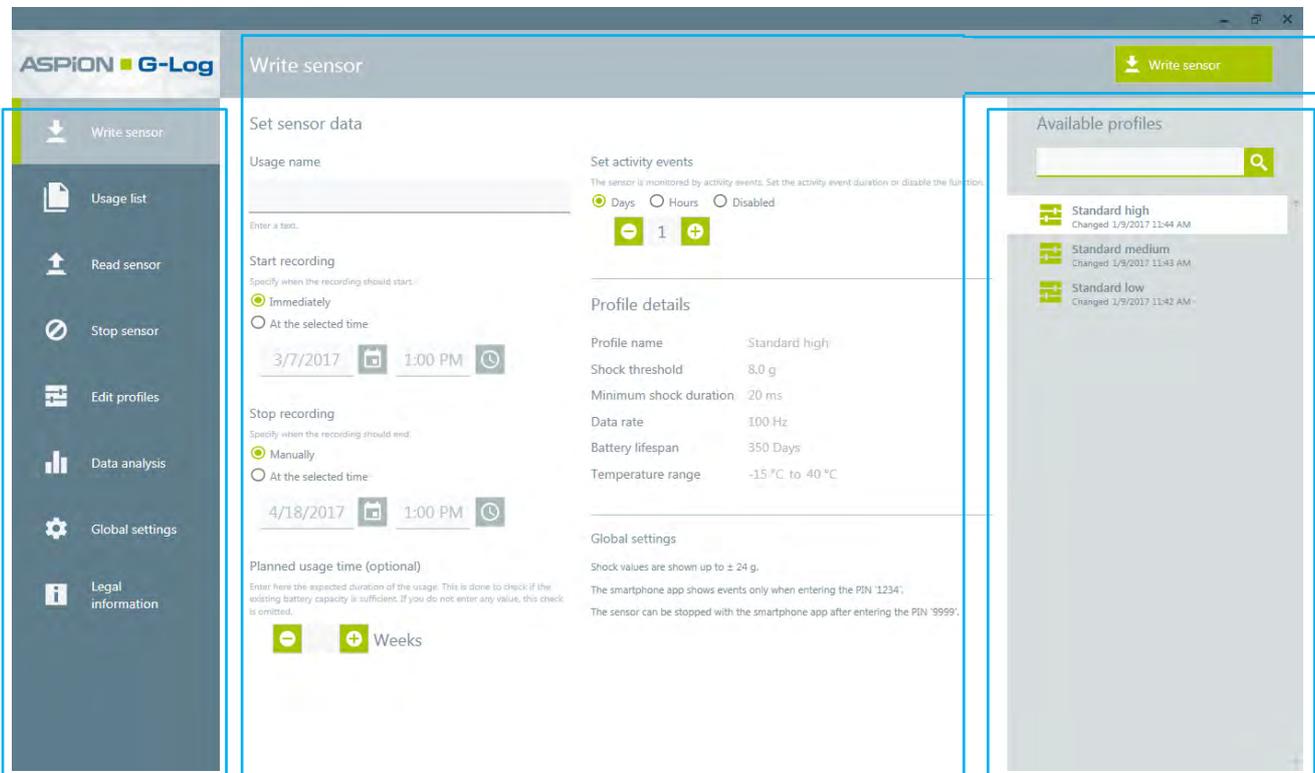
You can deinstall the software following the instructions of your operating system. Data, however, is not deleted, so it is still available if you install the program again. To permanently delete data, you must delete the respective data folder, see ASPION G-Log Manager – PC software, chapter 2.2, “Installing the ASPION G-Log Manager PC software“.

### 2.5 Information about product version

To find out which software version of the ASPION G-Log Manager you are currently deploying, please click on **Legal information** in the left pane.

### 3. General overview of the user interface

The ASPION G-Log Manager always starts with the **Write sensor** function. The software user interface is organized in three areas:



0

Functions

1

Content area and associated function buttons

2

List area

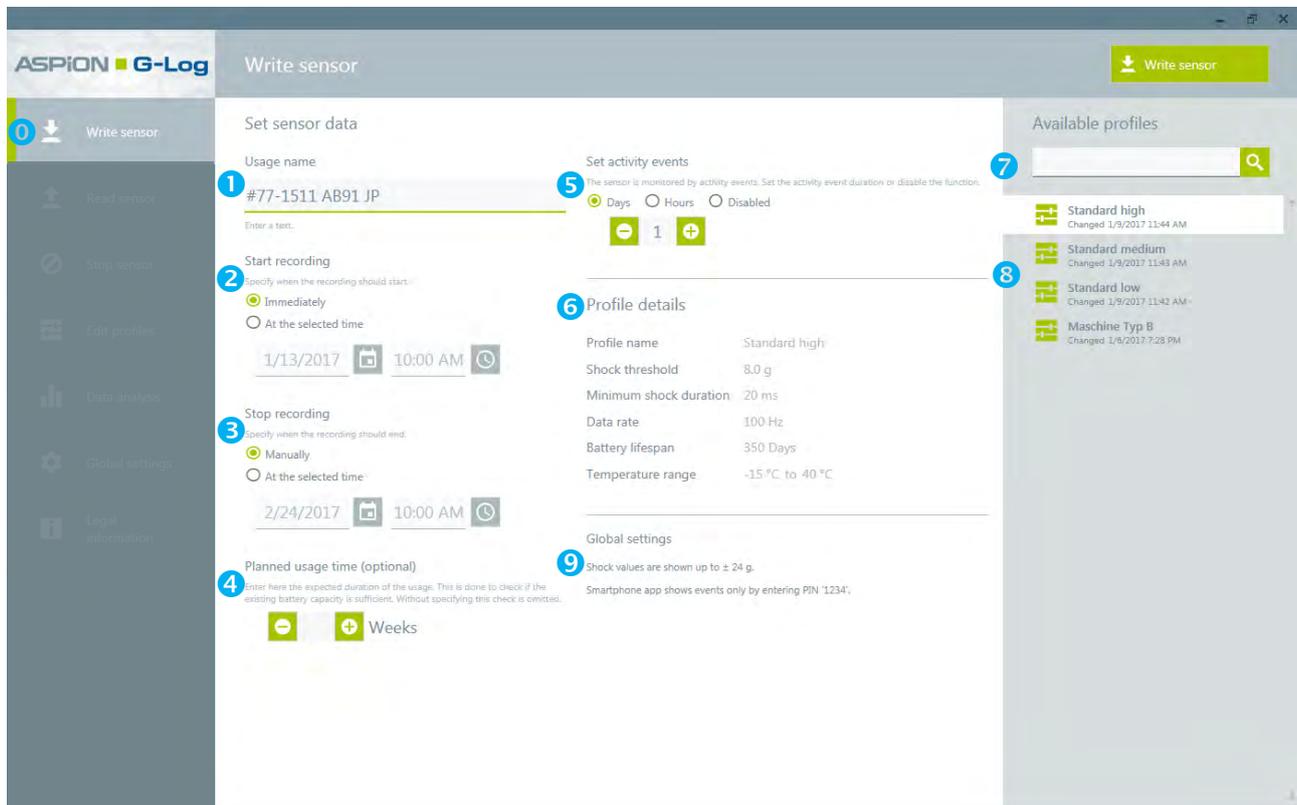
- Depending on the function you have selected, the content area and the list area change.
- When calling a function, the corresponding first entry of the list area is automatically marked.
- The entries in the list area are sorted by date: the entry with the latest date (e.g. created on, changed on, read on) appears at the top.

## 4. Operating the sensor

### 4.1 Defining the settings

You define the sensor details for your shipment with the **Write sensor** function.

- 0 Select the **Write sensor** function in the left area.



**Define the following settings:**

- 1 Enter any name for your shipment. This name is uniquely assigned to the shipment and the sensor and displayed, for example, for analyses. If this field is not filled in, the sensor ID will automatically be assigned.
- 2 Define a time when the sensor starts logging data: immediately or at a specific date/time in the future, at the earliest after the next full hour.

**Please note:** the sensor consumes 5% of its battery capacity per year in delivery condition. If it was used once and then deactivated, the battery consumption in a non-active state is increased to 25% per year.

- 3 Define a time when the sensor stops logging data: manually via the **Stop sensor** function or at a specific date/time in the future. The sensor can also be stopped with the smartphone app (→ see ASPION G-Log App for Smartphones).
- 4 By entering the planned usage time (weeks/optional), the program checks whether the battery life of the sensor will be sufficient for the planned transportation time. If the capacity is insufficient, you will receive a corresponding message.

- 5 To monitor sensor activity, a shock event is triggered automatically in regular intervals. This event is called activity event and is also used to visualize the orientation, see ASPION G-Log Manager – PC software, chapter 10, “Data analysis”.

Here you can define the time of the interval in days or hours or deactivate this function. The time when the activity event is triggered is defined as follows:

- for days: at the next full hour after the start date
- for hours: time-triggered by the number of hours starting with the start date and time (at the full hour)

**Example:**

Start = 25.05.17 at 06:30

>> when selecting 3 hours, the first recording is made on 25.05.17, at 10:00

>> when selecting 1 day, the first recording is made on 26.05.17, at 06:00

**Please note:** the sensor saves 286 events in total. Activity events are also included in that number. The non-volatile memory overwrites previous events, but the first and the 8 highest peak events are saved permanently including details, see ASPION G-Log shock sensor, chapter 1, “Technical data”.

- 6 You enter a predefined profile for each shipment. This profile contains threshold values, information on the battery life, and so on. You select the profile from the list area on the right.
- 7 The list view shows you all available profiles. If you have to select from a large number of available profiles, you will quickly find the required profile using the search function.
- 8 Select the desired profile here. The profile details will immediately be displayed in the content area.

**Please note:** you change a profile with the **Edit profiles** function, see ASPION G-Log Manager – PC software, chapter 6, “Editing profiles”.

- 9 Here, you will receive information about your global settings. If no information is displayed, the default setting applies: shock values up to  $\pm 16g$  are displayed; the ASPION G-Log App for smartphones displays all events directly, a PIN for stopping the sensor with the smartphone app is not assigned.

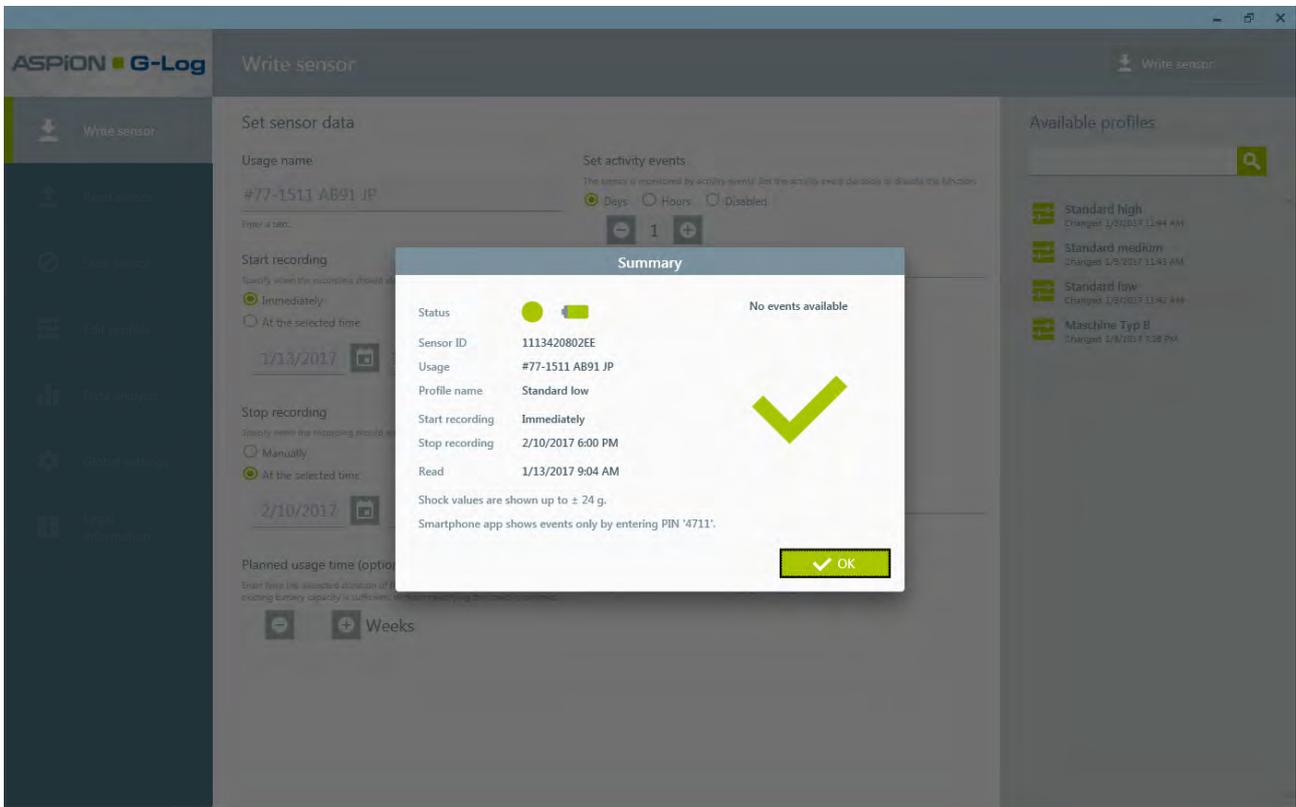
With the **Global settings** function you define whether you display shock events up to  $\pm 16g$  (= calibrated area) or up to  $\pm 24g$ . You can also define that events are displayed hidden when reading out data with the ASPION G-Log App and that they are only displayed for the smartphone user when entering a PIN. In addition, you can assign a PIN to stop the sensor with the smartphone app.

**Please note:** You make changes to the global settings with the Global settings function, see ASPION G-Log Manager – PC Software, chapter 7, “Global settings”.

## 4.2 Transferring data to sensor

 Sensor beschreiben

You transfer the selected settings by clicking the **Write sensor** button. Follow the instructions of the program. Put the sensor you want to write data to on the card reader. After the data has been successfully transferred to the sensor, the sensor is read out and its currently available data is displayed in the summary window.



The sensor is now ready to be mounted.

**Please note:** you find explanations on how to mount the sensor and a mounting template in ASPION G-Log shock sensor, chapter 2, “Mounting”.

### States

-  Sensor is activated and records events
-  Sensor is not activated and does not record any events
-  Current battery life in percent; display at mouse over

### Errors and problem solving

Possible error messages, causes and hints for problem solving, see ASPION G-Log Manager – PC software, chapter 11, “Errors and problem solving”.

## 5. Usage list

The usage list contains all settings used with the function **Write sensor** when the sensor is put into operation. This way, you always have an overview of your activated sensors with all the details.

- 0 Select the **Usage list** function in the left area.

The screenshot displays the ASPION G-Log Manager software interface. On the left is a sidebar with navigation options: Write sensor, Usage list (highlighted with a blue circle 0), Read sensor, Stop sensor, Edit profiles, Data analysis, Global settings, and Legal information. The main area is titled 'Usage list' and shows details for a selected usage. The details include: Sensor ID (111342080284), Usage name (#2466-8923 UK N1), Written (3/6/2017 2:55 PM), Start recording (Immediately), Stop recording (Manually), Planned time (6 Week(s) - highlighted with a blue circle 2), Remaining battery lifespan (13 Week(s)), Interval of activity events (2 Day(s)), Profile details (Shock threshold: 4.0 g, Minimum shock duration: 10 ms, Data rate: 400 Hz, Temperature range: 0 °C to 25 °C), and Global settings (Shock values are shown up to ± 24 g, and instructions on using the smartphone app). At the top right of the main area are buttons for 'Delete' (highlighted with a blue circle 3) and 'Create PDF'. On the right side, there is a panel titled 'Available usages' with a search bar (highlighted with a blue circle 4) and a list of usage entries, one of which is selected (highlighted with a blue circle 1).

- 1 Select an entry from the usage list.
- 2 Displays all details of the selected usage.
- 3 To delete an usage, select an entry in the list and click the **Delete** button. Export data of an usage as PDF with the **Create PDF** button, for example, to send this information by e-mail.

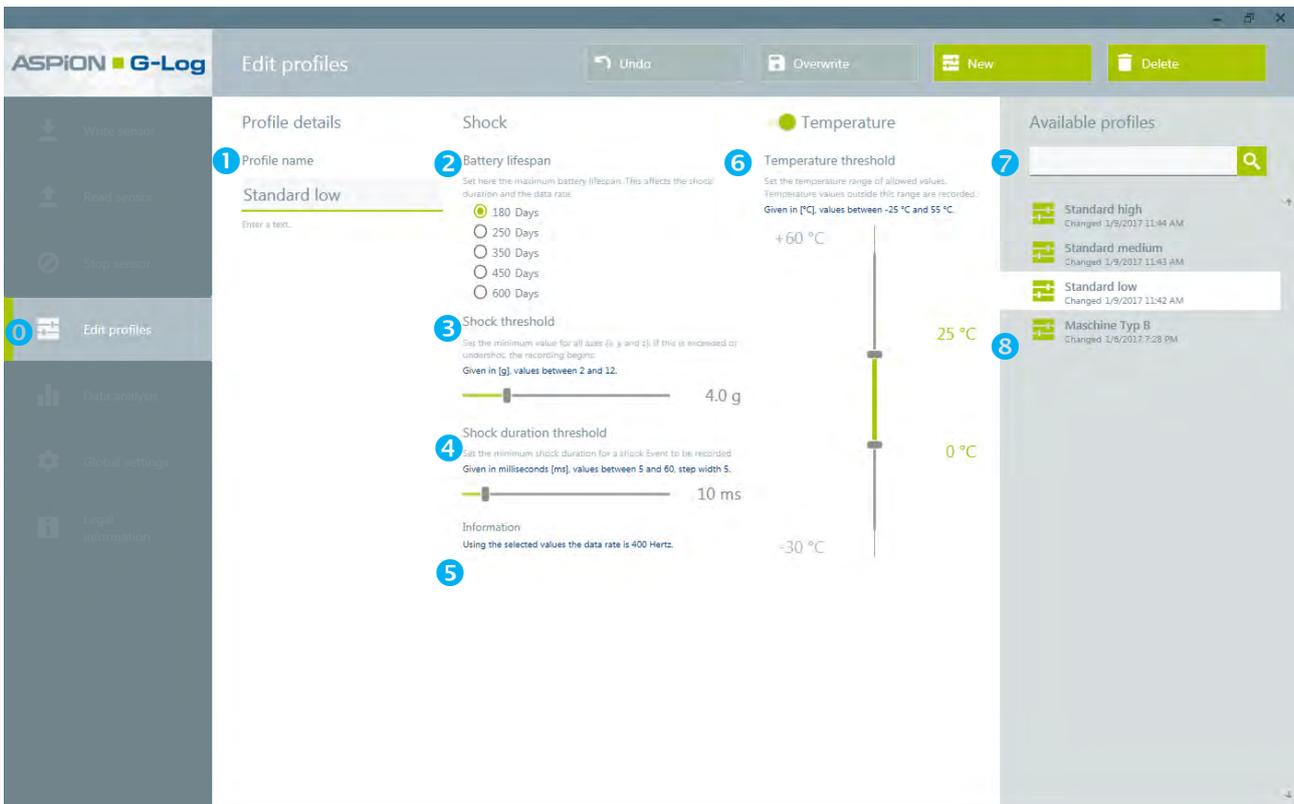
**Please note:** The usage list contains all settings used with the function **Write sensor** when the sensor is put into operation. You can simply delete the unneeded entry.

- 4 The list view shows all available usages. For a very large number of usages, the search will quickly provide the desired usage. You can enter the sensor ID and / or the name of the usage as a search term.

## 6. Editing profiles

Depending on your transported goods, you can create, edit and manage different profiles. You will receive three default profiles with the software to make orientation easier. Using the settings, you can define the battery lifespan and threshold values for which an event is recorded if the values are above or below this defined threshold.

- 0 Select the **Edit profiles** function from the left area.



### Profile settings:

- 1 Enter a profile name.
- 2 The battery lifespan affects the maximum recording time of the sensor.

**Please note:** the data rate is the higher, the shorter you define the lifespan of the battery. A high data rate is useful especially for the recording of short shocks.

- 3 Define the threshold value for one shock event for all 3 axes for both directions  $\pm$ . If this defined value is exceeded for at least one of the 3 axes with the corresponding duration (see 4), the sensor records this event.

**Please note:** the sensor saves 286 events (shock/temperature/activities). If the non-volatile memory is full, events of an earlier date are overwritten. This excludes the first shock value and the 8 peak shock values, see ASPION G-Log shock sensor, chapter 1, "Technical data". **Important:** with some combinations of selected threshold and shock duration, you may not receive relevant and useful recordings. Please refer to the already included default profiles and talk to your technicians or contact your supplier to be able to define the right settings.

- 4 The threshold value for the shock duration is entered in milliseconds.

**Please note:** the shorter the duration, the earlier a shock event is recorded.

- 5 The data rate is automatically calculated from the entries that were defined for the battery lifespan (see 2). The data rate is reduced for longer durations. Highest data rate: 400Hz; lowest data rate: 25Hz.
- 6 Set the temperature range for allowed temperature values. If values are outside this range, a temperature event is created and recorded. The value must be above or below the threshold for at least 10 minutes. By using the On/Off button, you can deactivate the recording of temperature events.

**An example for the scheme of recording temperature events:**

Settings: Allowed temperature range: 0 – 25°C

The temperature drops to -5°C for at least 10 minutes and then raises again to +1°C:

-> The sensor records a temperature event as soon as the temperature has risen to 1°C again. The date and time at the point at which the sensor returns to the allowed temperature range are logged.

The temperature drops to -5°C and remains in this range during the next 48 hours:

-> The sensor records a temperature event approx. every 10 hours; the date and time are then recorded each time after 10 hours have been expired.

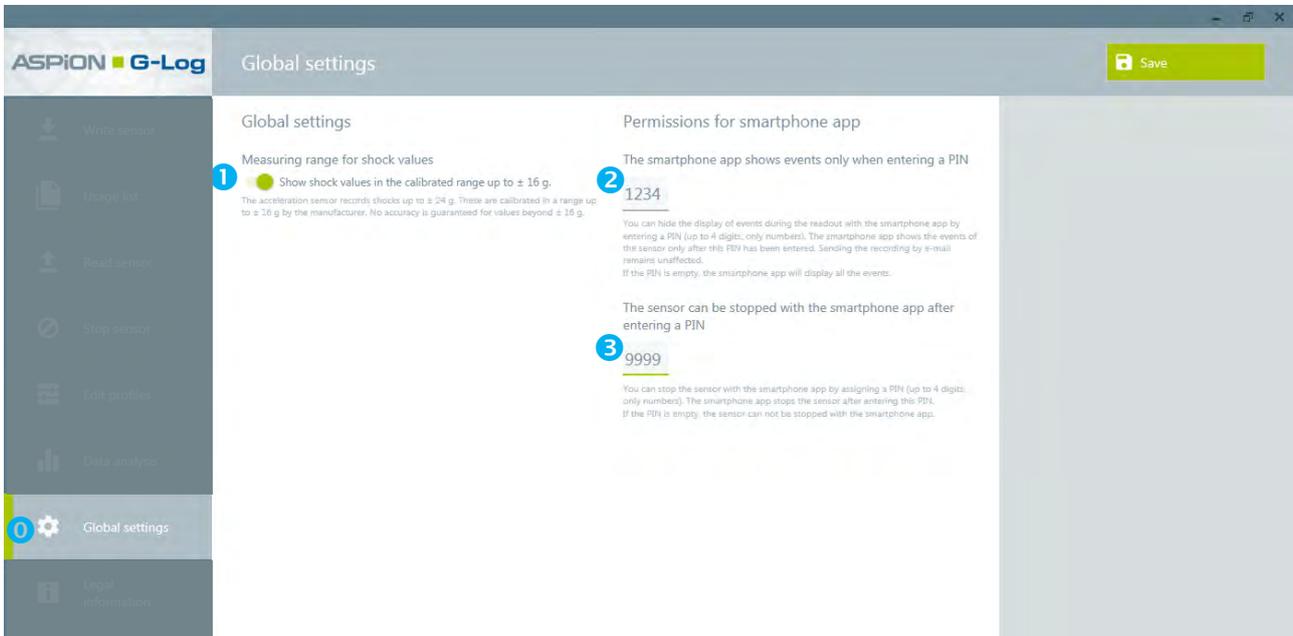
For each temperature event, the average temperature and one peak value are recorded.

- 7 The list view shows you all available profiles. If you have to select from a large number of available profiles, you will quickly find the required profile using the search function.
- 8 Select an existing profile here. The profile details will immediately be displayed in the content area. Now you can make changes, overwrite the profile or undo changes. You create a new profile with the **New** button. If you want to delete a profile, you select the corresponding profile from the list and click **Delete**.

## 7. Global settings

With the **Global settings** function, you make global settings which apply when writing data to the sensor. These settings apply as long as the sensor is used. Click on the **Save** button to change your entries.

- 0 Select **Global settings** in the left area.



- 1 Define here the display range for shock values. The “Show shock values in the calibrated range up to ± 16 g” option is activated as default setting. By switching to disable this option, you extend the range up to ± 24 g.

### Explanations for the measuring range

The accelerator sensor is calibrated up to ± 16 g by the manufacturer and records shock values up to ± 24 g. You can define yourself whether you want to restrict the display of recorded values to this calibrated range of up to ± 16 g or whether you want to display values up to ± 24 g.

**Please note:** we do not guarantee the correctness of values larger than ± 16 g.

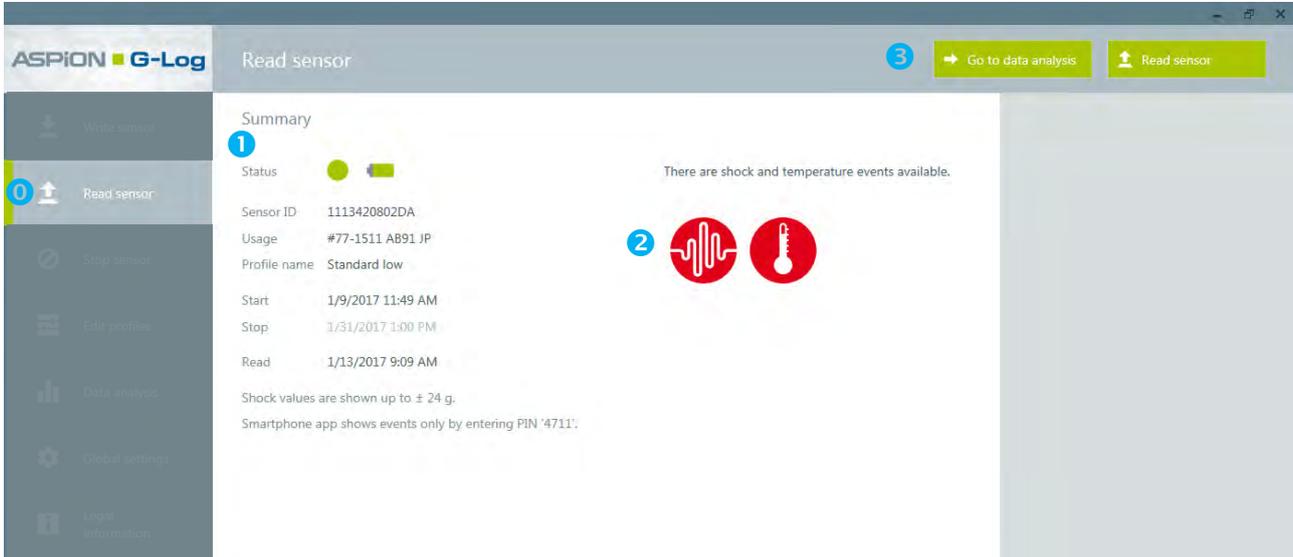
Use the Smartphone app permissions to control the behavior of the ASPION G-Log app:

- 2 The permissions for the ASPION G-Log App for smartphones allow you to control the display of data in the app. Per default, no PIN is entered and the ASPION G-Log App displays all events.  
  
Enter a PIN (up to 4 digits, only numbers). Now, the events that were recorded are hidden for the user when reading out the sensor with the ASPION G-Log App. Only if the user enters the PIN, the ASPION G-Log App displays all events, see ASPION G-Log App for smartphones. All other functions of the ASPION G-Log App are not affected.
- 3 Stopping the sensor with PIN: Per default, no PIN is assigned and the sensor can not be stopped with the ASPION G-Log App.  
  
Enter a PIN (up to 4 digits, only numbers allowed). Now, the recording of a sensor with the smartphone app can be stopped by entering this PIN (→ see ASPION G-Log App for Smartphones). It is not possible to continue the recording. A stopped sensor can be taken into a new operation (→ see ASPION G-Log Manager - PC software / 10. Stop sensor).

## 8. Reading the sensor

You receive analyzed data by clicking the **Read sensor** function in the left area. Click the **Read sensor** button. Follow the instructions of the program. Put the sensor on the card reader so it can be read out.

- 0 Select the **Read sensor** function in the left area.



- 1 The summary presents all important information recorded on the sensor at a glance.
- 2 The following symbols indicate whether shock or temperature events occurred:
  -  No events (only activity events, if previously defined)
  -  Existing shock events
  -  Existing temperature events
- 3 With the **Go to data analysis** button or the **Data analysis** function, you go to the events, see ASPION G-Log Manager – PC software, chapter 10, “Data analysis”.

### Further results after the data has been read out

- A sensor is activated, but no events are recorded.
- A sensor is stopped and has recorded events.
- A sensor is not activated in delivered condition and no events are recorded.

### Errors and problem solving

Possible error messages, causes and hints for problem solving, see ASPION G-Log Manager – PC software, chapter 11, “Errors and problem solving”.

## 9. Stopping the sensor

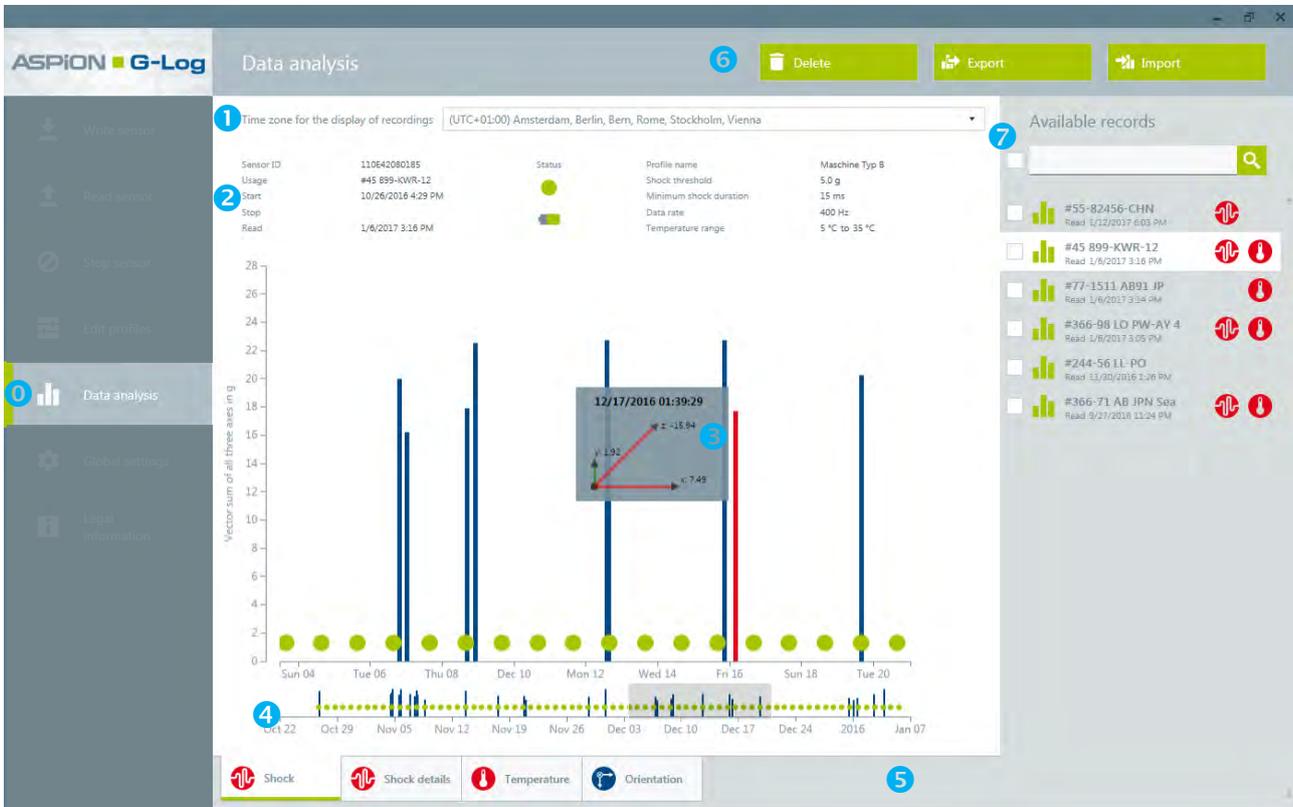
To stop the recording of events on a sensor, select the **Stop sensor** function in the left area. Click on the **Stop sensor** button. Follow the instructions of the program. Put the sensor you want to stop on the card reader.

**Please note:** recorded events will remain on the sensor after it was stopped. You can read out a stopped sensor at any time. With the **Write sensor** function, you can newly operate a stopped sensor again. The memory of the sensor will then be reset.

**10. Data analysis**

By going to **Data analysis** in the left area, you receive all information of a read-out sensor. The program automatically selects the first entry from the list view on the right.

- ① Select the **Data analysis** function in the left area.



**A data analysis includes the following information:**

- ① Select the time zone for the display of recordings. The time zones also include summer and winter times.
- ② Displays all details for the sensor and the shipment including the current state and profile details.
- ③ Display area of events: shock and activity events. By using the mouse-over function or clicking the left mouse button, you receive details for an individual event. The arrows of the axis displayed in red show an overlap of the threshold in the respective axe direction. The maximum values can be vary depending on the display range you have defined ( $\pm 16$  g or  $\pm 24$  g), see ASPION G-Log shock sensor, chapter 7, “Global settings”.

**Displays:**

Blue bars = shock event – as vector sum across all 3 axes in g  
 Green circles = activity event to control the activity of the sensor

**Please note:** if shock events are recorded at the same second, the bars may overlap. They may then partly not be displayed in red when using the mouse-over function. The bar with the lowest cumulative value is displayed at the front, followed by higher bars in the back. To retrieve more details, use the zoom function (see ④) or the export functions (see ⑥).

4 Zoom function: if you want to have more details of a certain time period, you can select a time period with a pressed-down left mouse key. This period will then be displayed in the upper content area. By double-clicking on this area, you go back to the overview.

5 The different tabs let you select the event you want to be shown. If you cannot select a tab, no events are recorded.

**Shock** = all shock and activity events; from start date to reading date (see figure on page 19)



**Shock details**

Displays the first recorded shock and 8 more peak shock events in each axes; they are permanently saved, also if the memory is full.

**Please note:** the peak shock events are calculated via an internal shock value index. It includes the strength and the duration of the shock.



**Temperature**

Displays temperature recordings which are measured out of the permitted range; you can additionally define the upper and lower range.

For the scheme of recording temperature events, please refer to ASPION G-Log Manager PC software, chapter 5, "Editing profiles".



**Orientation**

The activity events visualize the approximate orientation towards the 6 main directions. If the orientation changes, it will be displayed the next time an activity event is recorded.

6 You delete the currently active analysis with the **Delete** button.

With the **Export** button, you export the currently active analysis:

- as PDF report with all analyzed content and graphics
- as Excel file with all analyzed content in several Excel sheets

**Please note:** all date content both in the PDF and in the Excel file relate to the currently defined time zone.

- as proprietary G-Log file format

Select the desired format before saving the file.



With the **Import** button, you can import analyses saved in the proprietary G-Log format.

**Example for the usage of the proprietary G-Log format:**

A service technician reads out a sensor with an ASPION G-Log Manager once the transported good has arrived and exports the analyzed data in the proprietary G-Log format. Now he or she sends the file to a colleague in the main office via e-mail. This colleague imports the analysis in his or her ASPION G-Log Manager version. By doing so, he or she will see the same analysis view as the service technician on site. He or she can then also create a PDF report, for example, to forward it to a service provider.

7 The list view displays all available recordings of analyzed data. The symbols for shock and temperature indicate whether and what kind of events are recorded. If you have many events, you will quickly receive a result by searching the analysis via the search field.

You can select a number of analyses at once by ticking the checkbox next to each analysis. With the **Delete selection** button, you delete all selected analyses. You export all selected analyses in the desired format with the **Export selection** button.

## 11. Errors and problem solving

Error/Problem	Estimated cause	Probable solution
Sensor cannot be written or read.	Card reader does not recognize the sensor.	Remove the sensor from the card reader. Wait a moment and then repeat the process.
Sensor can no longer be read out, is not recognized by the card reader.	Empty battery or no contact with battery.	To read out the sensor, you can send it to the producer. If you do no longer need the sensor, please dispose of it correctly, see ASPION G-Log shock sensor, chapter 4, "Disposal".
The entered card reader name was not recognized.	Card reader is not connected correctly.	Check whether the USB connector of the card reader is connected correctly.
Data could not be transferred. The request was cancelled.	Card reader does not recognize the sensor.	Remove the sensor from the card reader. Wait a moment and then repeat the process.
Data could not be transferred. A Smartcard is required for the process.	The sensor is not completely connected to the card reader.	Place the sensor completely on the card reader and repeat the process.
Data could not be transferred. The data is invalid.	The sensor's firmware is not compatible to the PC software.	Contact your technical support.

### 11.1 Problems with the NFC card reader and Windows 7

The following error occurs with the Identiv uTrust 3700 F card reader and Windows 7: the "Smartcard PnP" function tries to install a new driver for each newly connected sensor. You can deactivate this service with the following steps (the description is provided by the producer of the card reader):

1. Click Start, enter "gpedit.msc" in the [Programs/Browse Files] field and click ENTER
2. At [Guidelines for local computer], go to [Computer Configuration] > [Administrative Templates]
3. Via [Windows Components] > [Smart Card], you go to [Turn on Smart Card Plug and Play service] and open the service with a double click
4. Select [Disable] and close the window with [OK]
5. Close the [Local Group Policy Editor] and restart the computer
6. Now the driver prompt for Smartcards should no longer appear.

If "gpedit" cannot be found on your computer, you must manually change the entries in the registry (Start > Enter "regedit" in the search field). Depending on the exact version of the operating system, one (x86) or two (x64) entries must be edited or added in the registry:

x86:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\ScPnP]
"EnableScPnP"=dword:00000000
```

x64:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\ScPnP]
```

```
"EnableScPnP"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\ScPnP]
```

```
"EnableScPnP"=dword:00000000
```

If you enter „dword:00000001“ instead of „dword:00000000“ as a value for "EnableScPnP" the service is enabled again.

**For FAQs and more helpful information, please go to our ASPION customer portal at [www.aspion.de](http://www.aspion.de).**

# ASPION G-Log App for smartphones

## 1. Description and installation

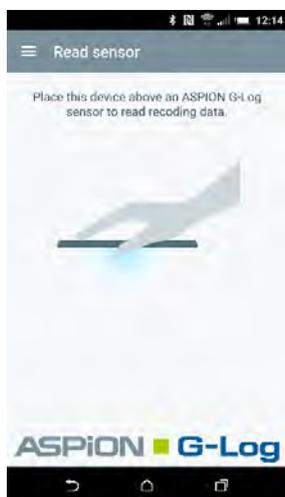
With the ASPION G-Log app, a sensor can be directly read out and stopped. You require a NFC capable smartphone with Android operating system Version 4.1 and later. The ASPION G-Log app can be downloaded for installation from the Google Play Store free of charge at:

<https://play.google.com/store/apps/details?id=com.aspion.glog>

The ASPION G-Log app runs in English or German, depending on the language set in the operating system of your smartphone.

## 2. App functions

The ASPION G-Log App includes the following functions and views, the app starts with reading the sensor:



Read sensor: place your smartphone close to the sensor in the NFC chip area

The app shows general information, traffic light, symbols, the status and the defined settings, if no PIN protection has been created.

The respective events including date and time are displayed in the individual tab sheets:

Date / Time	X Axis	Y Axis	Z Axis
13/01/2017 10:27	4.99 g	-0.77 g	-18.82 g
12/01/2017 18:42	0.96 g	-2.64 g	-19.78 g
12/01/2017 18:41	-7.49 g	-3.36 g	-18.05 g
12/01/2017 18:35	-0.41 g	-7.30 g	18.43 g
12/01/2017 14:43	0.58 g	-24.58 g	-24.58 g
11/01/2017 09:35	-4.42 g	0.58 g	15.94 g

Shock events

Date / Time	Temperature	Peak value / Minimum value
14.01.2017 12:04	25.3 °C	25 °C
12.01.2017 21:59	25.3 °C	25 °C
07.01.2017 17:49	26.2 °C	27 °C
06.01.2017 16:34	25.3 °C	25 °C
06.01.2017 16:09	27.3 °C	30 °C
06.01.2017 14:28	30.0 °C	31 °C
06.01.2017 14:08	30.2 °C	31 °C
06.01.2017 13:27	27.9 °C	29 °C
06.01.2017 09:24	25.4 °C	25 °C

Temperature events

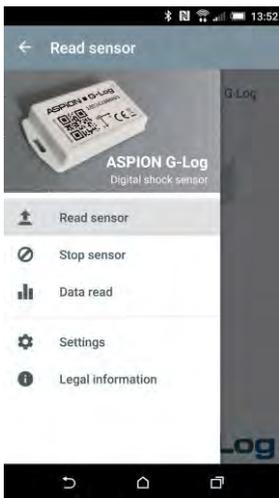
Date / Time	X Axis	Y Axis	Z Axis
13/01/2017 11:00	0.19 g	-0.19 g	-1.15 g
12/01/2017 11:00	0.00 g	0.00 g	-1.15 g
11/01/2017 11:00	0.00 g	-0.38 g	-1.19 g
10/01/2017 11:00	0.00 g	-0.19 g	-1.15 g

Activity events

### Sending data via e-mail

You can send the read-out data of a sensor immediately via e-mail by clicking .

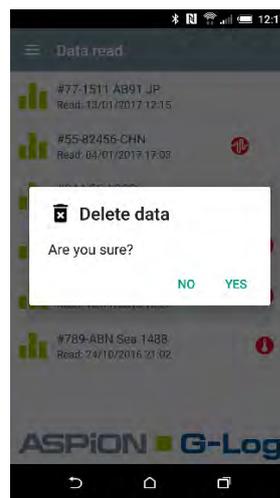
You can access the menu with ← or ≡



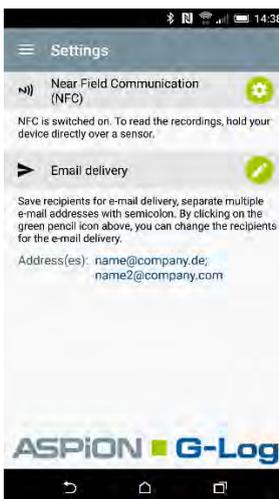
Menu contents



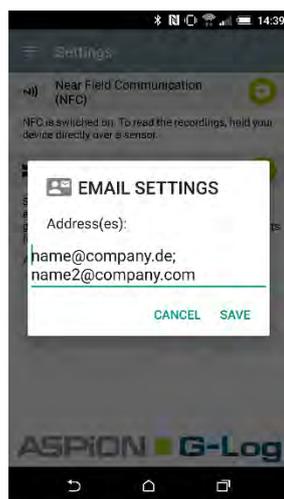
List of read-out data



Delete: press an entry for a longer time, confirm with YES



Settings for NFC and e-mail addresses



Saving e-mail addresses

If analyses are always sent to the same recipients, you can predefine them at **E-mail settings**. When sending an analysis via e-mail, the app starts an e-mail program on the smartphone and creates an e-mail with the respective information from the read-out data. The analyzed data is sent as attached file in the .glog format to the e-mail address. It can then be imported, analyzed and further processed with the ASPION G-Log Manager – PC software, see chapter 10, “Data analysis”.

**Hidden display when using PIN protection:**

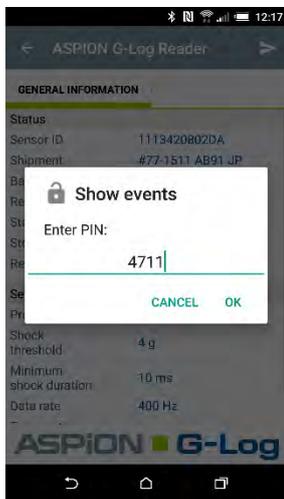
If a PIN for the display of events has been created in **Global settings** (see ASPION G-Log Manager - PC software, chapter 7, “Global settings”), the smartphone app only displays general information but no possibly recorded shock or temperature events, or activity events. All other functions, for example, sending analyzed data in .glog format and further analyzing it with the ASPION G-Log Manager are not affected.

You enter the PIN to display the events as follows: Swipe over the display and you will see a field in which you enter the PIN. After you have correctly entered the PIN and confirmed with OK, all event details will be displayed.

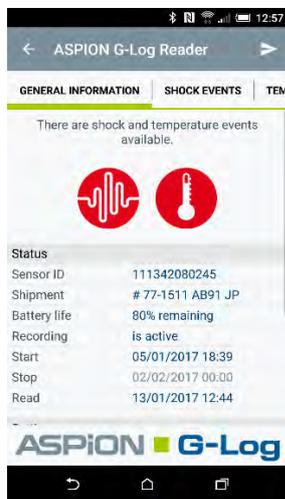
Views for PIN protection:



Display for analysis with PIN protection



After swiping: enter the assigned PIN



Display of analysis after entering the PIN

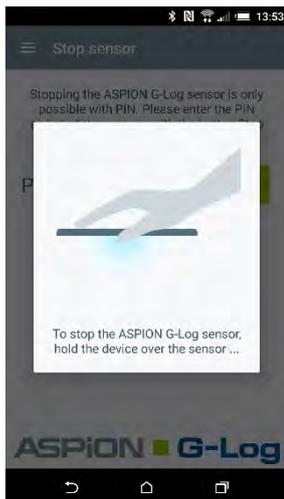
### Stop sensor with PIN:

If a PIN for stopping recording has been assigned to the **Global settings** (→ see ASPION G-Log Manager - PC software / 7. Global settings), you can stop the sensor with the smartphone app. If no PIN is assigned for stopping, this function is not available.

Views to stop the sensor (select the function via the menu):



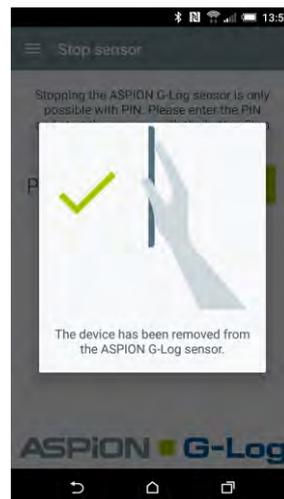
Enter PIN, click on **Stop sensor**



Hold the smartphone over the sensor and wait until



Sensor has been stopped; then remove the smartphone



## Contact and support

### Manufacturer

If you have any questions please contact your manufacturer:

#### **ASPiON GmbH**

Abraham-Lincoln-Allee 12

76149 Karlsruhe, Germany

[www.aspion.de](http://www.aspion.de)

Support hotline: +49 (0)721 / 8 51 49-128

E-mail support: [support@aspion.de](mailto:support@aspion.de)

**For FAQs and more helpful information, please go to our ASPiON customer portal at [www.aspion.de](http://www.aspion.de).**