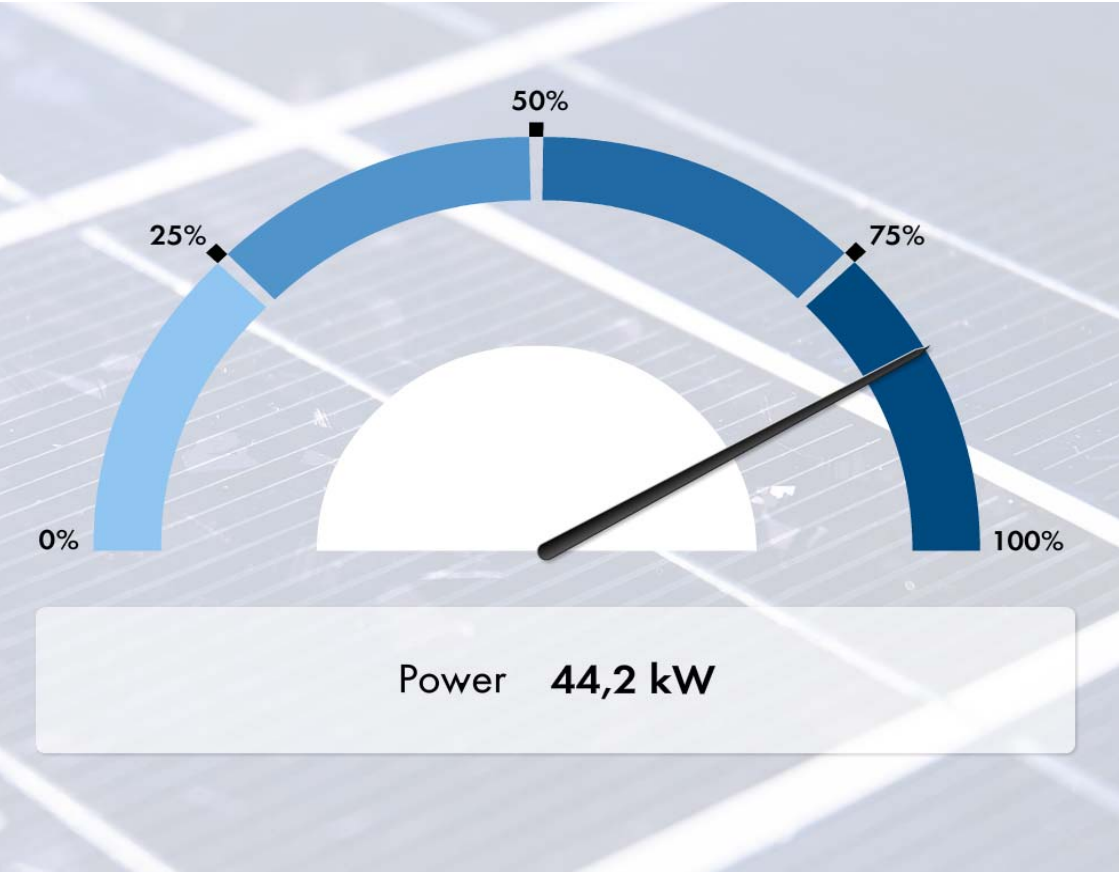
Solar data technology

Flashview 2.2

Technical Description



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1 Flashview 2.2

1.1 Validity

This manual is valid for Flashview version 2.2 and above.

1.2 Functions

Flashview for Sunny WebBox is a free presentation software program for your PV system. Flashview processes the yield values of the inverters and the measured values of the Sunny SensorBox and graphically displays them on your computer.

The data collected by the Sunny WebBox may deviate from the data of the electricity meter.

The data collected by the Sunny WebBox and the data displayed by Flashview may deviate from the data of the electricity meter. Therefore, the Sunny WebBox data must not be used for billing purposes.

1.3 System Requirements

The following system requirements are necessary for the successful installation of Flashview:

- Sunny WebBox with firmware 1.41 or above.
- PC with at least 1GHz processing power with Windows XP or Windows Vista operating system. **or** Apple Macintosh with at least 1 GHz processing power with MacOS X.
- ZIP program, in order to unzip the installation file (e.g. WinZip).

1.4 Installing Flashview

1. With Windows: Use a ZIP program to unzip Flashview_V22_WIN.zip to a desired directory.

   or

   With MacOS X: Use a zip program to unzip Flashview_V22_MAC.zip to a desired directory.
2. Execute Flashview.exe or Flashview.app in the "Flashview_V22" folder.

☑ Flashview starts, taking over the entire window.

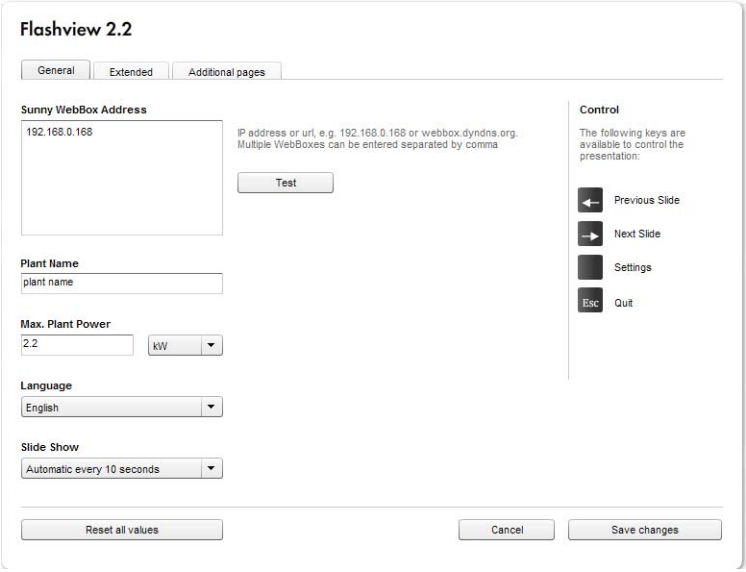
When starting for the first time, the Flashview settings window opens automatically. If the settings window does not open when Flashview starts, press the space bar. The settings window opens.

2 Flashview Settings

The following subsections explain the settings options in Flashview. Press the space bar to access the settings dialog.

2.1 Configuring the Basic Settings

Before you can use the Flashview presentation, you must configure the following settings:



1. Select the desired language from the "Language" drop-down list.
2. In the "Sunny WebBox address" input box, enter the IP addresses or URLs where the Sunny WebBox can be accessed, for example "192.168.0.168" or "webbox.dyndns.org".

   Multiple Sunny WebBox addresses are to be separated by commas (maximum of 10 Sunny WebBox devices).

   Line breaks (return) are not permitted.

   Select [Test] to test the connection to the Sunny WebBox.

Performance of the Sunny WebBox when accessing several Flashview installations

The Sunny WebBox transmits data to Flashview to display a PV system's yield data. If several Flashview installations are accessed simultaneously on one Sunny WebBox, the Sunny WebBox transmits the data correspondingly. Excessively frequent data queries may adversely affect the data transmission. Do not access more than 5 Flashview installations on a Sunny WebBox simultaneously.

Sunny WebBox with Sunny SensorBox

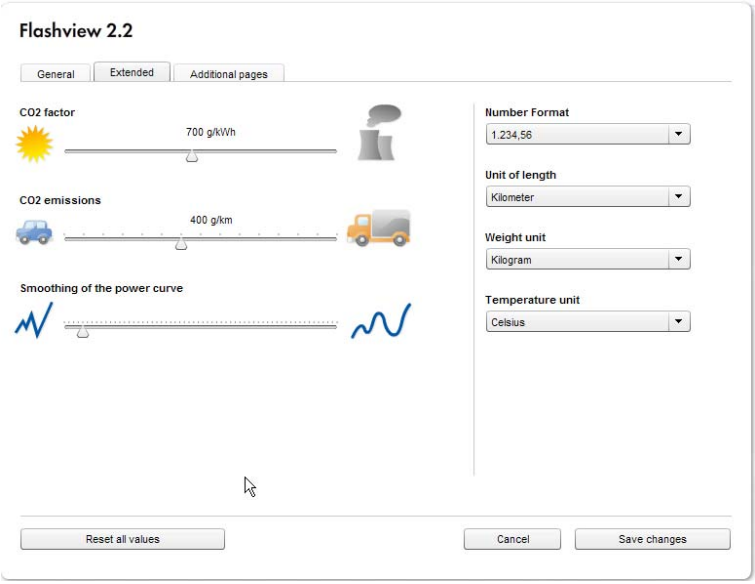
If there are several Sunny WebBox addresses, the address of the Sunny WebBox connected to the Sunny SensorBox must be listed first. Otherwise, Flashview will not display the environmental data from the Sunny SensorBox. If several connected Sunny WebBox devices are equipped with a Sunny SensorBox, only the data of the first Sunny SensorBox is displayed.

3. Enter the name in the "Plant name" input box. This name will be displayed as the title in the presentation.
4. Set the plant's maximum power output in the "Max. plant power" input box. The presentation's yield diagrams are scaled using this information.
5. Set the progression of the slide show in the "Slide show" box. Progression through the presentation: manual or automatic change after 5/10/20 or 30 seconds.
6. Select [Save changes].

☑ The changes are saved, and the presentation starts.

2.2 Advanced Settings

In the "Advanced" dialog, set the values to be used as the basis for calculating the ecological values in the presentation. Furthermore, set the number format as well as the units for length, weight and temperature readings used in the presentation.



2.2.1 Setting the CO_2 factor

Using the "CO_2 Factor" slider, set the amount of CO_2 that accrues during one kilowatt hour of electricity generated by your energy supplier. You can obtain this value from your energy supplier.

Generating electricity by burning fossil fuels (e.g. by coal-fired power stations) emits CO_2. The CO_2 factor indicates how many grams of CO_2 are emitted for every one kilowatt hour of electricity generated. Flashview uses this value to calculate the quantity of CO2 saved by the PV system.

2.2.2 Setting the CO_2 emissions

Using the "CO_2 emissions" slider, set the quantity of CO_2 that your car emits for each kilometer driven. You can obtain this value from your car manufacturer.

Flashview uses this value to calculate how much CO_2 the PV system saved in terms of kilometers driven.

2.2.3 Setting the smoothing of the power curve

For example, while your PV system is operating, clouds may temporarily cause shadows. This results in short-term changes in the system yield. Using the "Smoothing of the power curve" slider, set an amount that takes into account the extent of short-term changes in the display of the energy yield.

2.2.4 Setting the unit of length

Using the "Unit of length" box, set the presentation's unit of measurement for distance traveled.

You can choose either kilometers or miles.

2.2.5 Setting the number format

Using the "Number format" box, set the separator for thousands and the decimal point indicator to be used for displaying numbers in the presentation.

Possible number formats: 1.234,56 or 1,234.56.

2.2.6 Setting the weight unit

Using the "Weight unit" box, set the presentation's unit of measurement for the amount of CO_2 emitted.

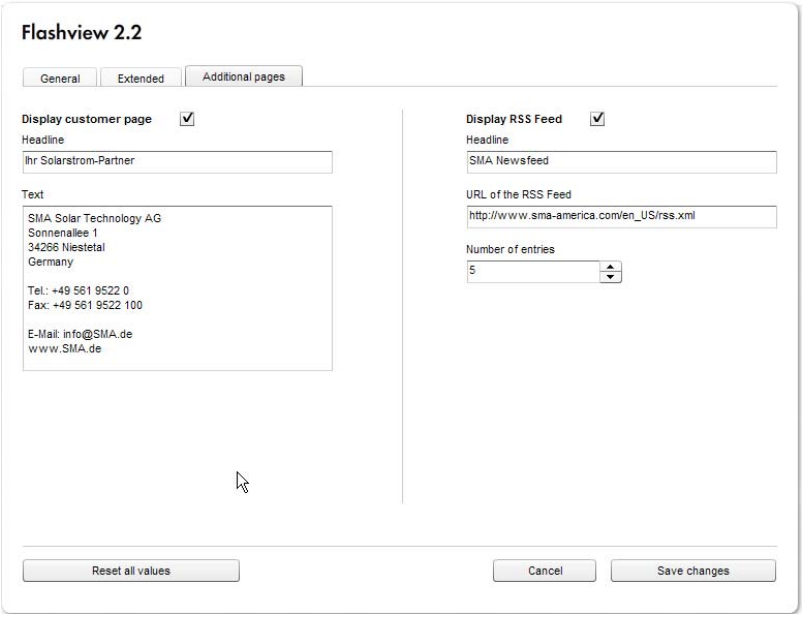
You can choose either kilograms or pounds.

2.2.7 Setting the temperature unit

Using the "Temperature unit" box, set the presentation's unit of measurement for displaying the module temperature and the ambient temperature.

You can choose either degrees Celsius or degrees Fahrenheit.

2.3 Setting the customer page and RSS Feed



2.3.1 Setting the customer page

Flashview offers you the opportunity to display a page with your company logo and your company address in the presentation.

To customize your individual customer page, take the following steps:

1. Using the "Display customer page" checkbox, set whether the customer page will be displayed in the presentation.
2. Enter the title of the customer page in the "Headline" input box.
3. In the "Text" input box, enter the text to be displayed next to the logo.
4. Select [Save changes].

☑ The changes are saved, and the presentation starts.

Setting the Logo on the Customer Page

You can change the logo on the customer page. The image must be in .png format. The recommended size for the logo is 250 x 250 pixels. Perform the following steps:

1. Save the image in the Flashview_V22/graphic folder with the name logo.png.

   The existing logo.png file (if present) will be overwritten.
2. Quit Flashview by pressing [ESC] and restart.

☑ The new logo will be displayed.

Hiding the Logo

If you do not want to display a logo, delete the logo.png file from the Flashview_V22 /graphic folder.

2.3.2 Setting the RSS Feed

RSS (Really Simple Syndication) is a service which sends the contents of a website similar to a news ticker. Each article on the website will be provided in an RSS feed with its headline, the first lines of the main text and a link to the original page.

A feed reader allows the reader to view a summary of the website and read complete articles that he or she finds interesting.

Flashview offers you the opportunity to display a page in the presentation with the latest news in an RSS feed.

You can use the following settings to adjust your RSS feed page:

1. Using the "Display RSS feed" checkbox, set whether the RSS feed page will be displayed in the presentation.
2. In the "Headline" input box, enter the title of the RSS feed page.
3. In the "URL of RSS feed" input box, enter the address of the RSS feed.
4. In the "Number of entries" box, set the maximum number of RSS feeds to be displayed in the presentation. The maximum number of feeds displayed is limited to the amount of space available on the page. Further entries are automatically hidden.
5. Select [Save changes].

☑ The changes are saved, and the presentation starts.

Setting the Logo on the RSS Feed Page

You can change the logo on the RSS feed page. The image must be in .png format. The recommended size for the logo is 250 x 250 pixels. Perform the following steps:

1. Save the image in the Flashview_V22/graphic folder with the name rssfeed.png.

   The existing rssfeed.png file (if present) will be overwritten.
2. Quit Flashview by pressing [ESC] and restart.

☑ The new logo will be displayed.

Hiding the Logo

If you do not want to display a logo, delete the rssfeed.png file from the Flashview_V22/graphic folder.

2.4 Changing Background Image

You can change the background image of your presentation. The image must be in .png format. The recommended image size is 1600 x 1200 pixels. Images larger than 480 x 360 pixels are scaled to full screen. Images smaller than 480 x 360 pixels are displayed in their original size. Perform the following steps:

1. Save the image in the Flashview_V22/graphic folder with the name background.png.

   The existing background.png file (if present) will be overwritten.
2. Quit Flashview by pressing [ESC] and restart.

☑ The new background image will be displayed.

Restoring Default Background Image

If you want to display the default background image again, delete the background.png file in the Flashview_V22/graphic folder.

2.5 Controlling the presentation

Once the presentation has started, the sequence of the individual slides can be controlled via the keyboard. To this end, use the following keys on your keyboard:

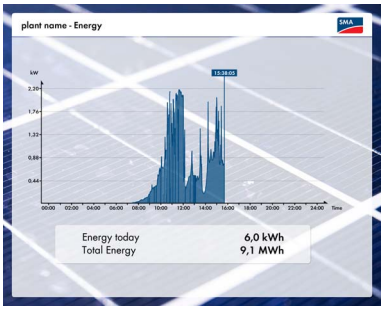
Left arrow key	Previous slide
Right arrow key	Next slide
Space bar	Settings
Esc	Quit

2.6 Display of the presentation

Once the presentation has started, the following slides are shown, either manually or automatically, depending on the configuration. The following is an explanation of the individual displays.

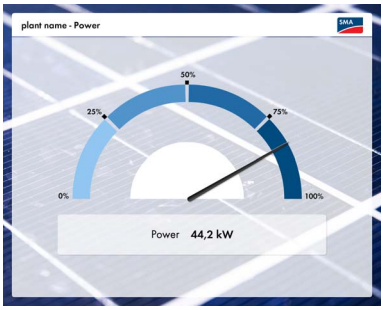
Yield

The yield view provides information about the PV plant's daily and total yields. After Flashview starts, the power produced for the current day is displayed. To ensure that the yield is displayed correctly, make sure that the plant's maximum power output is set in the program settings.



Power

The power view displays the PV plant's present power output. To ensure correct representation of the power values, make sure that the plant's maximum power output is set in the program settings.



Ecology

The ecological view provides information on the CO_2 saved by the PV system. In program settings, set the value upon which the calculation is based.

Environmental Data

The display with environmental data is only shown if a Sunny SensorBox is connected to the Sunny WebBox. The recorded measurement values irradiation, module temperature, and wind speed are displayed. If the Sunny SensorBox is equipped with an ambient temperature sensor, the ambient temperature is also displayed.

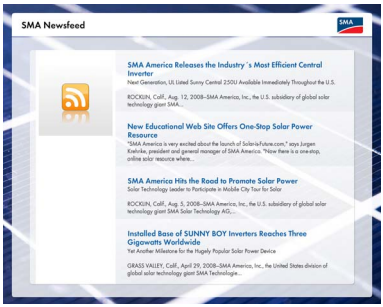
Customer Page

This display shows your individual data with a logo or an image of your choice.

You configure the settings for your customer page and its display using program settings.

RSS Feed

This page displays the RSS feed you have set. The settings for the RSS feed and its display are configured using program settings.



3 Troubleshooting

- Flashview starts and shows an empty background image.
  - Do not launch Flashview.exe from the zipped file. First use a ZIP program to unzip the files on your computer.
- Flashview starts and shows no data.
  - Depending on your PC's system utilization, it may take some time before the visualization of your plant data begins.
- Flashview starts and shows the SMA logo in the middle of the screen.
  - Flashview is not receiving any data from the Sunny WebBox. Check the Sunny WebBox settings in the Flashview settings window (space bar) via the "Test" button. If necessary, correct the IP address or URL of the Sunny WebBox in Flashview and adjust the settings of the router and the firewall.
- Displays (yield, power, and ecology) do not display any values.
  - The power of your PV plant is set too high. Check the plant's maximum power output in the Flashview settings window (press space bar).
  - Inverters do not deliver any radiation data (e.g. at night, when no radiation occurs, measurement data from the Sunny SensorBox, such as temperature and wind speeds, continue to be displayed).
- The environmental data is not displayed even though a Sunny SensorBox is installed.
  - If there are several Sunny WebBox addresses, the address of the Sunny WebBox connected to the Sunny SensorBox must be listed first. Check that the Sunny WebBox addresses are in the right order in Flashview's settings window.
- Flashview displays fewer RSS feed entries than those set in program settings.
  - If the RSS feed entries are so long that not all entries can be displayed, only a limited number of entries are displayed.
- The RSS feed entries are displayed differently in Flashview than on the website of the RSS feed.
  - Flashview first tries to display the content of the RSS feed's description tag. The description tag contains a summarized version of the entry.
  - If the RSS feed does not have a description tag, Flashview displays the contents of the content tag. This is how it is displayed on the RSS feed website.

4 Contact

If you have technical problems concerning our products, please contact our Service Line. We require the following information in order to provide you with the necessary assistance:

- The Flashview version number
- Serial number and firmware version of the Sunny WebBox
- Operating system

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