

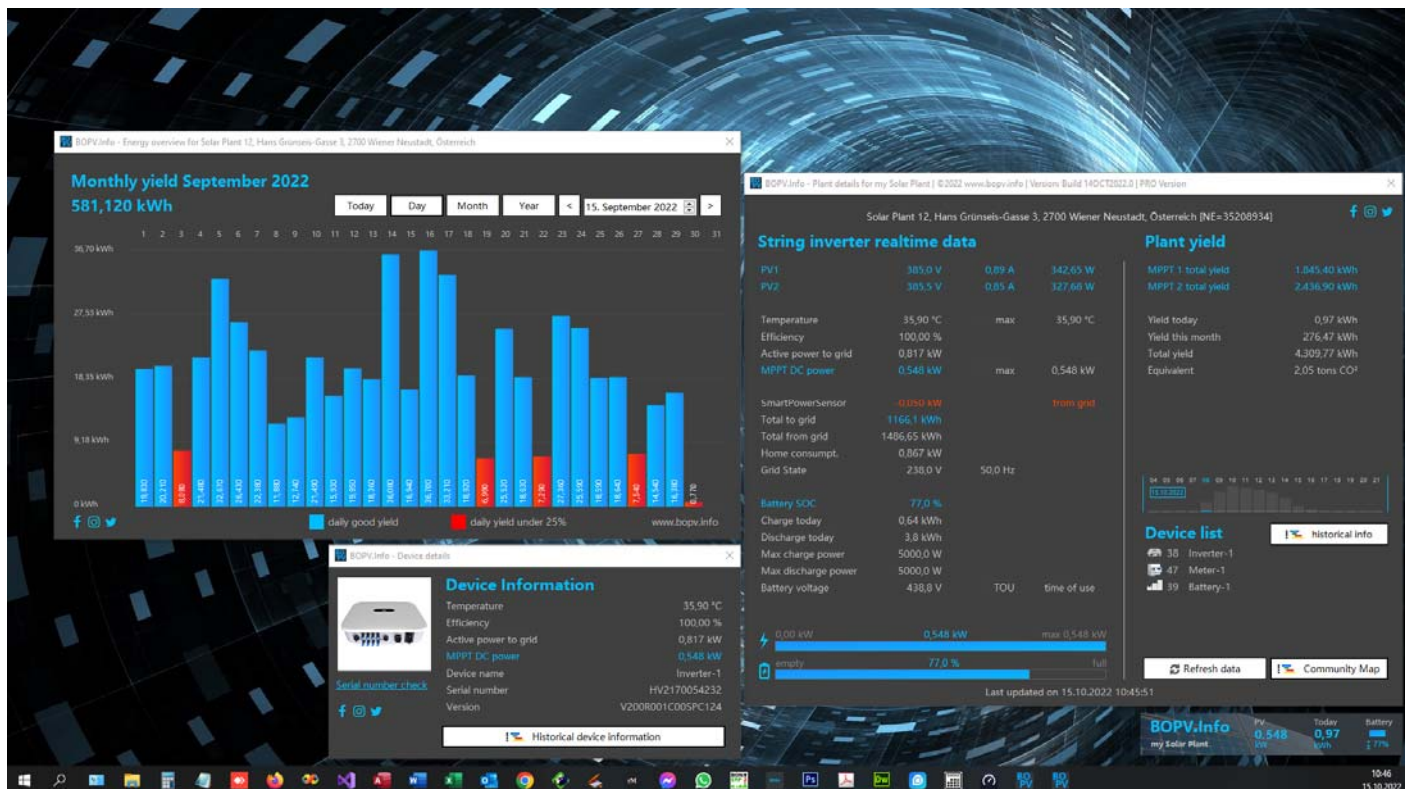


# HUAWEI SUN2000 & LUNA2000

## Windows App (+ FRONIUS GEN24)

Manual Version April 2024

System Requirements: Windows 10/11 and .NET Framework 4.8, Huawei SUN2000 Inverter



## Foreword

You have probably already logged in to the Huawei FusionSolar portal via your smartphone app or via a browser and observed your system. It takes minutes to find all the information you want. And the repeatedly required login is annoying.

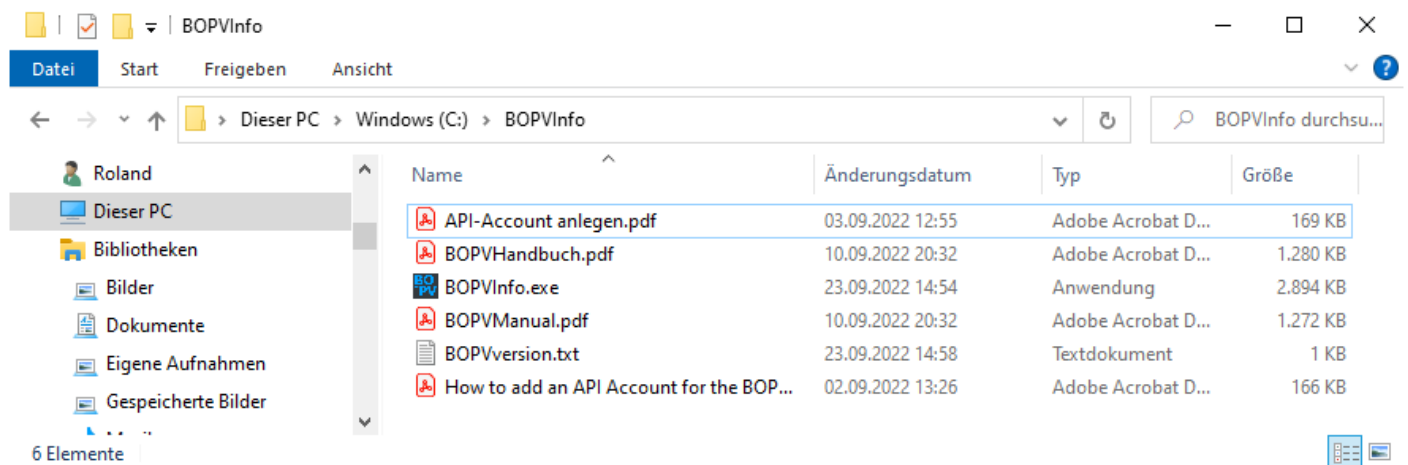
In addition, you may sit privately or professionally almost daily at the PC and would also like to follow the performance of your PV system on your company PC or on your home office computer. You can do this with the BOPV.Info application. Or you would like to charge your car with the PV surplus, operate the air conditioning or heating or switch on an additional consumer (e.g. heating element in the hot water tank).

Then BOPV.Info ist the perfect windows app for you.

If you want a bit more features, check out [www.BOPV.uno](http://www.BOPV.uno) or [www.BOPV.mini](http://www.BOPV.mini).

## Installation

Download the installation package from [www.bopv.info](http://www.bopv.info). After installation, you will find a shortcut on the desktop, a shortcut in the startup folder and the program files on C:/BOPVInfo.

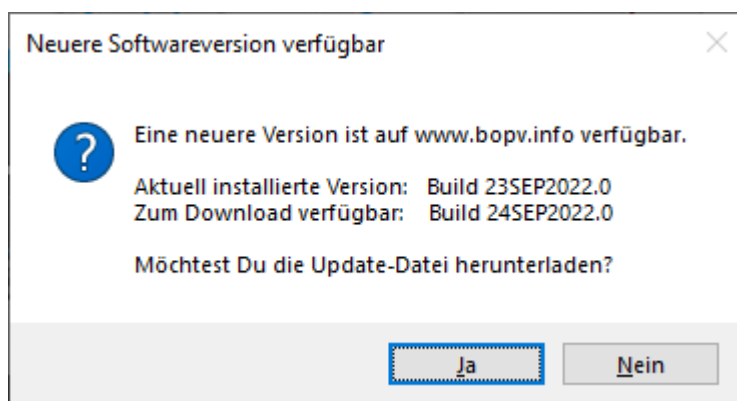


Start the application with a double click.

If a Windows security prompt comes, confirm it with "Run anyway". The files are regularly scanned for viruses and are therefore considered safe.

## Update

Every time you start the program BOPV.Info check if an update is available and ask yourself if you want to download it. Answer "yes" and the setup of the current version will be downloaded and executed. Your data and settings will be retained during the update.



## Settings

The first time you start BOPV.Info, you will automatically be taken to the settings. You only have to enter the API credentials for the beginning. You can find out how to get these in the separate PDF "How to add an API Account for the BOPV.pdf". If you do not have admin rights yourself, please ask your installer. Select "API" as the data source.

**BOPV.Info - Einstellungen**

**Datenquellen**

Datenquellen: **API + BOPV.mini Server** IP BOPV.mini server: **192.168.0.242** **test**

**Northbound API Zugangsdaten**

API URL: **https://intl.fusionsolar.huawei.com**

Benutzer: **WhiteCubePV\_API** *Erstelle einen neuen 'Northbound' Benutzer im FusionSolar Portal (für die Anleitung hier klicken).*

Passwort: **\*\*\*\*\***

☐ Bei neuen API Accounts ab 2023 aktivieren

**PRO version**

Versionsinfo: **PRO Version (6/10 activated)** [jetzt bestellen](#)

**Lizenzaktivierung**

**Sprache / Sonstiges**

Sprache: **deutsch** **Temperatursensoren**

**ModbusTCP Konfiguration\***

IP Adresse: **192.168.0.188** **test**

MBUS-ID	Value	Strings	Name
MBUS-ID SUN2000 1:	3	2	
MBUS-ID SUN2000 2:	2	2	
MBUS-ID SUN2000 3:	0	0	
MBUS-ID LUNA/DTSU:	2		

☒ String Daten aufzeichnen

**Widget Einstellungen**

Anlagenname: **WhiteCube PV**

PV Power: **PV** Batterie-Kapazität (kWh): **30,000**

Heute: **Heute**

Batterie: **Batterie**

Ins Netz:  **reset Widget Labels**

Hauslast:

Hintergrund: **black** **Energy Management** **klassisches Hausbild** **topmost**

**Sync Einstellungen**

Cloud API sync Interval: **3 Minuten** **5 Minuten** **10 Minuten**

**Balkonkraftwerk**

Shelly IP Adresse: **192.168.0.240** **test**

☒ Shelly PRO 4 PM Channel: **0**

**reset MAX Werte**

**speichern & neu start**

### Explanation of the individual points in the settings:

"Northbound API credentials" = API access data and API server (intl.fusionsolar.huawei.com i.e.)

"PRO version" = Enter the license key you received when you purchased the PRO version

"Widget labels" = You can personalize the labels in the small status window.

"reset widget labels" = resets the individual widget labels

"ModbusTCP configuration" = function of the PRO version – explained further down in the manual

"2<sup>nd</sup> PV plant (balkony)" = IP address for Shelly Plug S Balkonkraftwerk. If you are using a Shelly PRO 4 PM, then tick the appropriate box.



"Sync Settings" = query interval on the Huawei FusionSolar Cloud

"reset MAX values" = reset stored max values of temperature and PV-Power

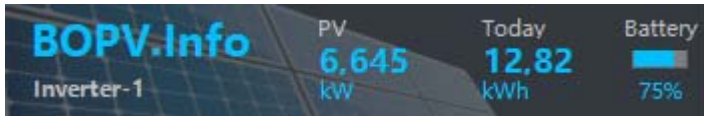
"save and restart" = apply changes and restart

"Language" = choose your interface language

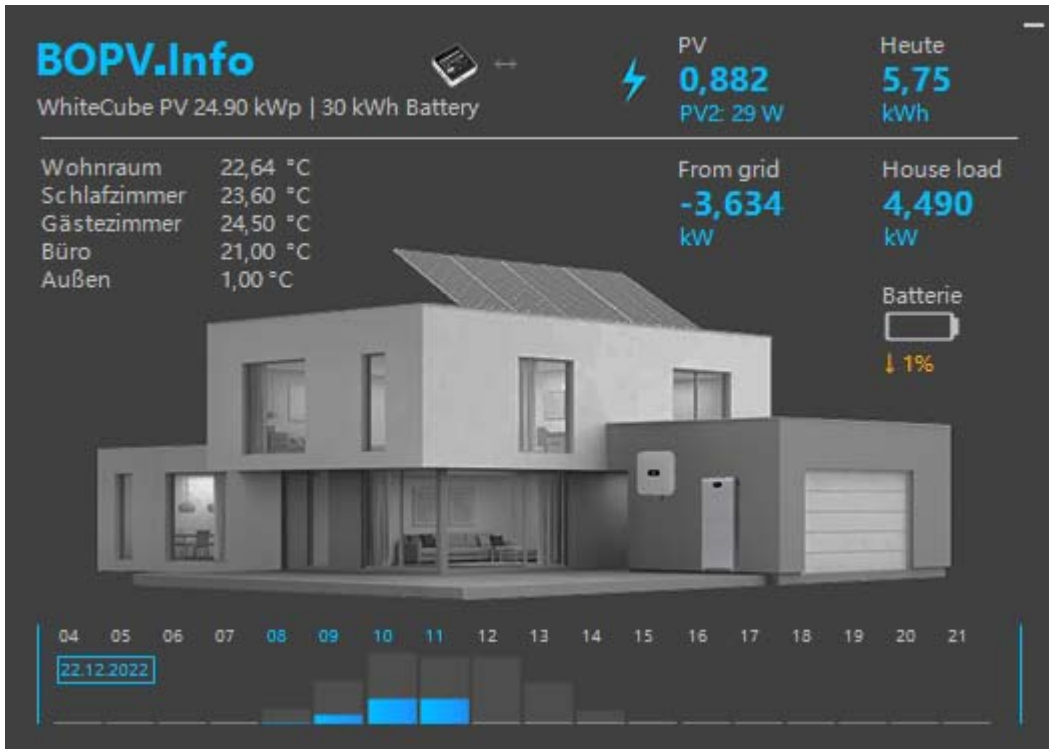
"use original inverter names in device list" = Shows the names from FusionSolar and not the type in the device list

## Basic functions:

Immediately after starting, the status window appears on the screen:



or this screen:



You can position the status window individually on the screen with the left mouse button. When exiting the application via the "Exit" menu, the last window position is saved.

## Explanation of the values in the status window:

"Bottom left" = name of the first inverter in the system or an individual designation ("Plant name" in the settings)

"PV" = current DC power of your photovoltaic system in kW

"Today" = today's total yield in kWh

"Battery" = the battery indicator (if a battery is installed).

## With the right mouse button, you get to the menu:

### Explanation of the menu items:

"Show plant details" = opens or closes the detail window (will be explained in the next section). If the check mark is visible on the left side of the menu item, the detail window opens automatically when the program is started. You can also open the detail window by double-clicking on any blue text module in the status window.

"Refresh device list" = logs in again and updates the device list (like a restart)

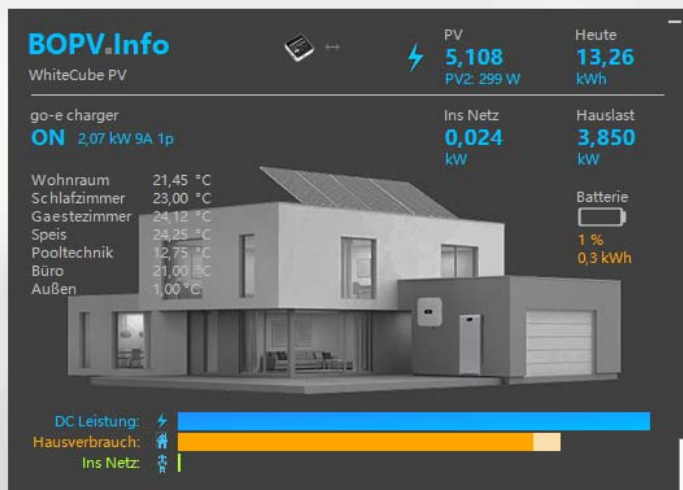
"Use energy surplus" = Here you can set how your PV surplus should be used

"DAIKIN remote control" = starts the DAIKIN screen remote control (IP address required at first start)

"KIOSK mode" = starts the presentation mode in the current screen as a full-screen application

"Settings" = here you get to the settings

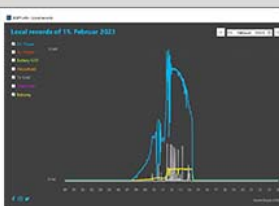
"Exit" = finished BOPV.Info and saves all window positions



Historische Geräteinformationen  
(nur für API User bis 06/22)



Ertragsübersicht  
Jahr, Monat, Tag, Stunde



Lokale Aufzeichnungen  
aller Grunddaten (neu)

- Widget umschalten
- Zeige Kraftwerksdetails
- Berichte**
- Community Map - Kraftwerksvergleich
- Moduloptimierer Details
- KIOSK Modus
- DAIKIN Fernsteuerung
- Geräteliste aktualisieren
- Überschussenergie verbrauchen
- Logfile
- Einstellungen
- BOPV.app
- BOPV.mini
- Ertrag- und Kostenrechner
- Tutorials
- Update (Build 27FEB2023.0 installiert)
- Hilfe auf [www.bopv.info](http://www.bopv.info)
- Beenden



## Plant details

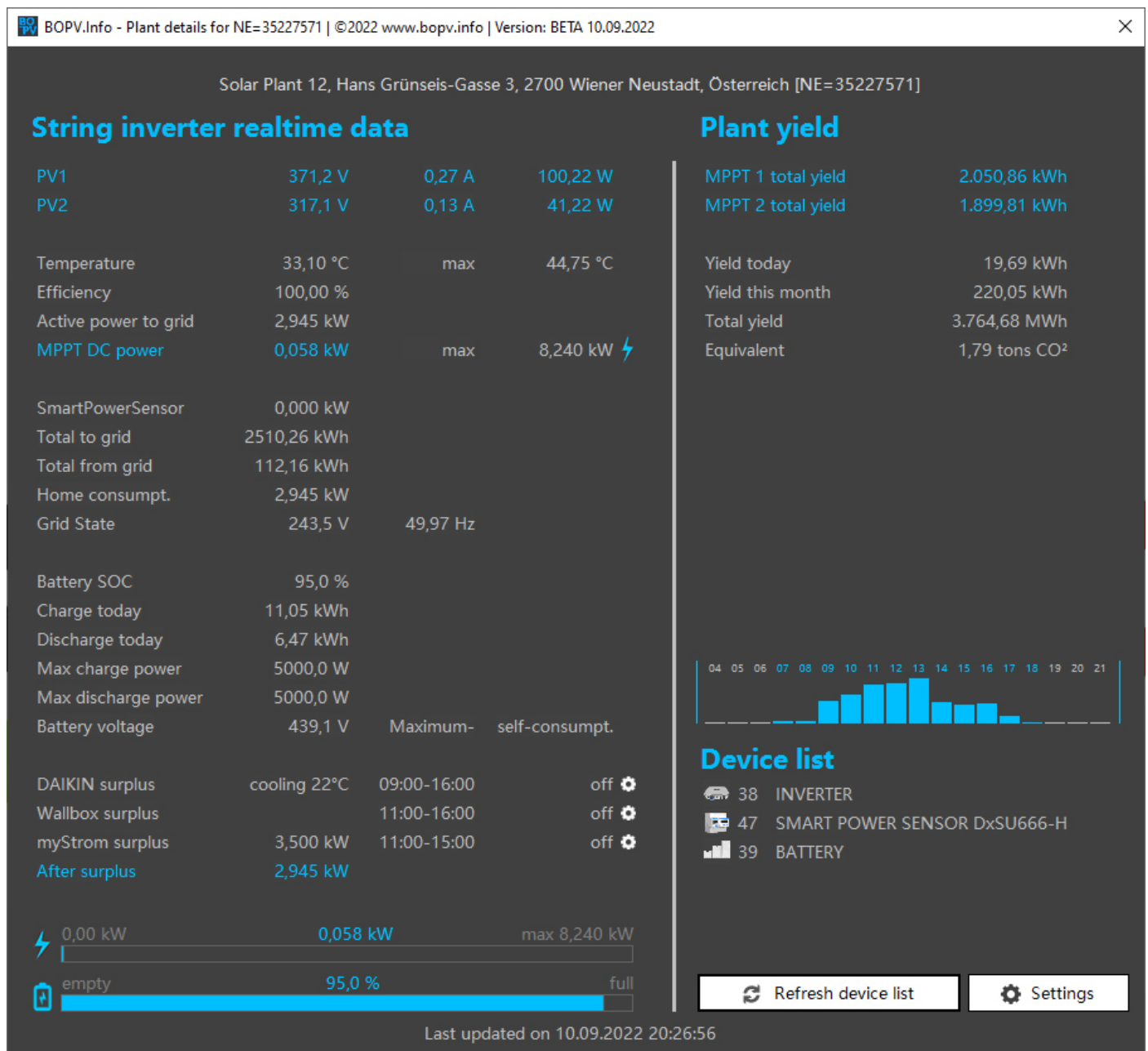
You can access the plant details either via the first menu item or by double-clicking on one of the blue texts in the widget. Here you can see all plant data in the overview. The values are usually self-explanatory. We are happy to answer questions about the values in the Facebook support group:

<https://www.facebook.com/groups/1160839111137832>

"Refresh device list" = logs in again and updates the device list (like a restart)

"Settings" = here you get to the settings

You can change the window in height if you get more or less information displayed.



The designations "PV1", "PV", ... and "MPPT 1", "MPPT 2", ... are not very revealing. Here you can provide the individual strings and MPP trackers with individual names. Simply double-click on an entry and enter an alternative label.

New PV-string label

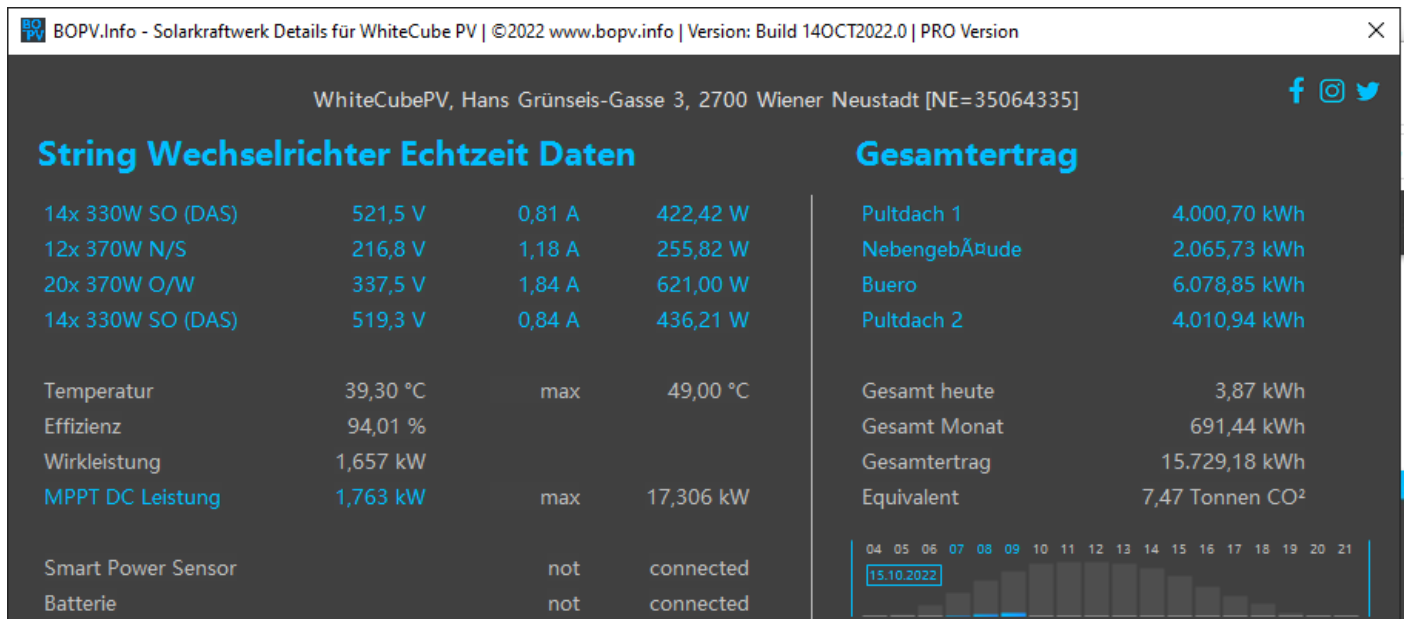
Please enter new label for this PV string:

OK

Abbrechen

14x 330W SO (DAS)


The result can then look like this:



If you double-click on an entry in the device list "Device list", you will get more information about this connected device. If you click on the serial number, it will be copied to the clipboard and the Huawei website for serial number query will be opened. You can check your warranty there.

BOPV

BOPV.Info - Geräteinformation



Seriennummer prüfen

f i t

Geräteinformationen

Temperatur	39,30 °C
Effizienz	94,01 %
Wirkleistung	1,657 kW
MPPT DC Leistung	1,763 kW
Gerätebezeichnung	SUN2000-30KTL-M3
Seriennummer	6T21B9051083
Version	V100R001C20SPC117

Historische Geräteinformationen

## Multi-power plant management for installers (will no longer be available for new API accounts from 2023)

If you manage more than one solar power plant, you can manage up to 100 solar power plants with BOPV.Info. A selection screen will automatically appear when you start the program after you have entered the API access data. Simply select the desired power plant.

BOPV.Info - please select plant


Please select your plant!

Search:

[f](#) [@](#) [t](#)

More than one plant found in your account. Please select a plant to display real time data.

0	BOPVInfo Demo Solar Plant 1	NE=35277616	John Sample Sample Street 1 41185 Sampletown
1	BOPVInfo Demo Solar Plant 2	NE=35316159	John Sample Sample Street 2 41185 Sampletown
2	BOPVInfo Demo Solar Plant 3	NE=35264126	John Sample Sample Street 3 41185 Sampletown
3	BOPVInfo Demo Solar Plant 4	NE=35118185	John Sample Sample Street 4 41185 Sampletown
4	BOPVInfo Demo Solar Plant 5	NE=34663722	John Sample Sample Street 5 41185 Sampletown
5	BOPVInfo Demo Solar Plant 6	NE=34928451	John Sample Sample Street 6 41185 Sampletown
6	BOPVInfo Demo Solar Plant 7	NE=35351891	John Sample Sample Street 7 41185 Sampletown
7	BOPVInfo Demo Solar Plant 8	NE=35269788	John Sample Sample Street 8 41185 Sampletown
8	BOPVInfo Demo Solar Plant 9	NE=35196281	John Sample Sample Street 9 41185 Sampletown
9	BOPVInfo Demo Solar Plant 10	NE=35340574	John Sample Sample Street 10 41185 Sampletown
10	BOPVInfo Demo Solar Plant 11	NE=34971649	John Sample Sample Street 11 41185 Sampletown
11	BOPVInfo Demo Solar Plant 12	NE=35338274	John Sample Sample Street 12 41185 Sampletown
12	BOPVInfo Demo Solar Plant 13	NE=35161548	John Sample Sample Street 13 41185 Sampletown
13	BOPVInfo Demo Solar Plant 14	NE=35060054	John Sample Sample Street 14 41185 Sampletown
14	BOPVInfo Demo Solar Plant 15	NE=35047041	John Sample Sample Street 15 41185 Sampletown
15	BOPVInfo Demo Solar Plant 16	NE=35341196	John Sample Sample Street 16 41185 Sampletown
16	BOPVInfo Demo Solar Plant 17	NE=35158287	John Sample Sample Street 17 41185 Sampletown
17	BOPVInfo Demo Solar Plant 18	NE=35095489	John Sample Sample Street 18 41185 Sampletown
18	BOPVInfo Demo Solar Plant 19	NE=35342124	John Sample Sample Street 19 41185 Sampletown
19	BOPVInfo Demo Solar Plant 20	NE=35281998	John Sample Sample Street 20 41185 Sampletown
20	BOPVInfo Demo Solar Plant 21	NE=35044530	John Sample Sample Street 21 41185 Sampletown

 Load plant BOPVInfo Demo Solar Plant 2

Attention: This function is only available to API accounts created before 2023 after a change to the HUAWEI API. New API users cannot use this function at all or only to a limited extent.



As you can see in this example screenshot, you can also manage larger plants:

Solar Plant 12, Hans Grünseis-Gasse 3, 2700 Wiener Neustadt, Österreich [NE=34971649]

## String inverter realtime data

## Razsmernik 4 - 6T2...

## Razsmernik 3 - 6T2...



## Plant yield






## Razsmernik 1 - ES21...

## Razsmernik 4 - 6T21...

## Razsmernik 3 - 6T21...

Yield today	128,85 kWh
Yield this month	15.312,33 kWh
Total yield	377.202,67 kWh
Equivalent	179,17 tons CO <sup>2</sup>

## Device list

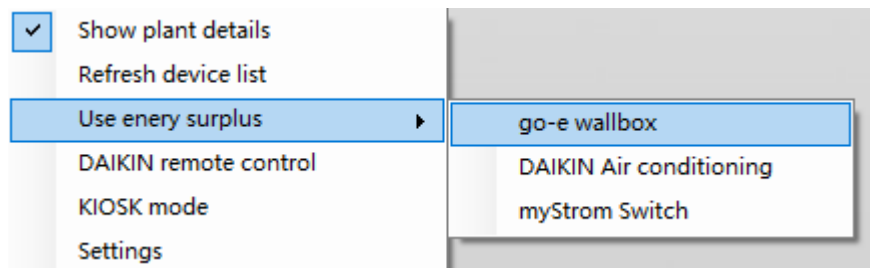
	62	HV2160166048
	01	Razsmernik 2 - ES2140034862
	01	Razsmernik 1 - ES2140034955
	01	Razsmernik 4 - 6T2149034273
	01	Razsmernik 3 - 6T2149034271

 Select another plant
  Community Map

Last updated on 15.10.2022 11:03:03

## Surplus functions

With BOPV.Info, you can also consume your PV electricity surplus yourself in a surplus-controlled manner. Either with a go-e wallbox, a DAIKIN air conditioner or with a myStrom switch. This is only possible with an API connection.



## go-e Wallbox

You can access the go-e wallbox either via the local network or via the go-e Cloud. Choose "local API" or "cloud API" according to your preference. With the local API, you only need the IP address of the wallbox. With the Cloud IP you need the serial number and an API key. Click on the question mark next to the input fields to see where in the go-e app you can find this information and which API functions you need to activate in the go-e app.

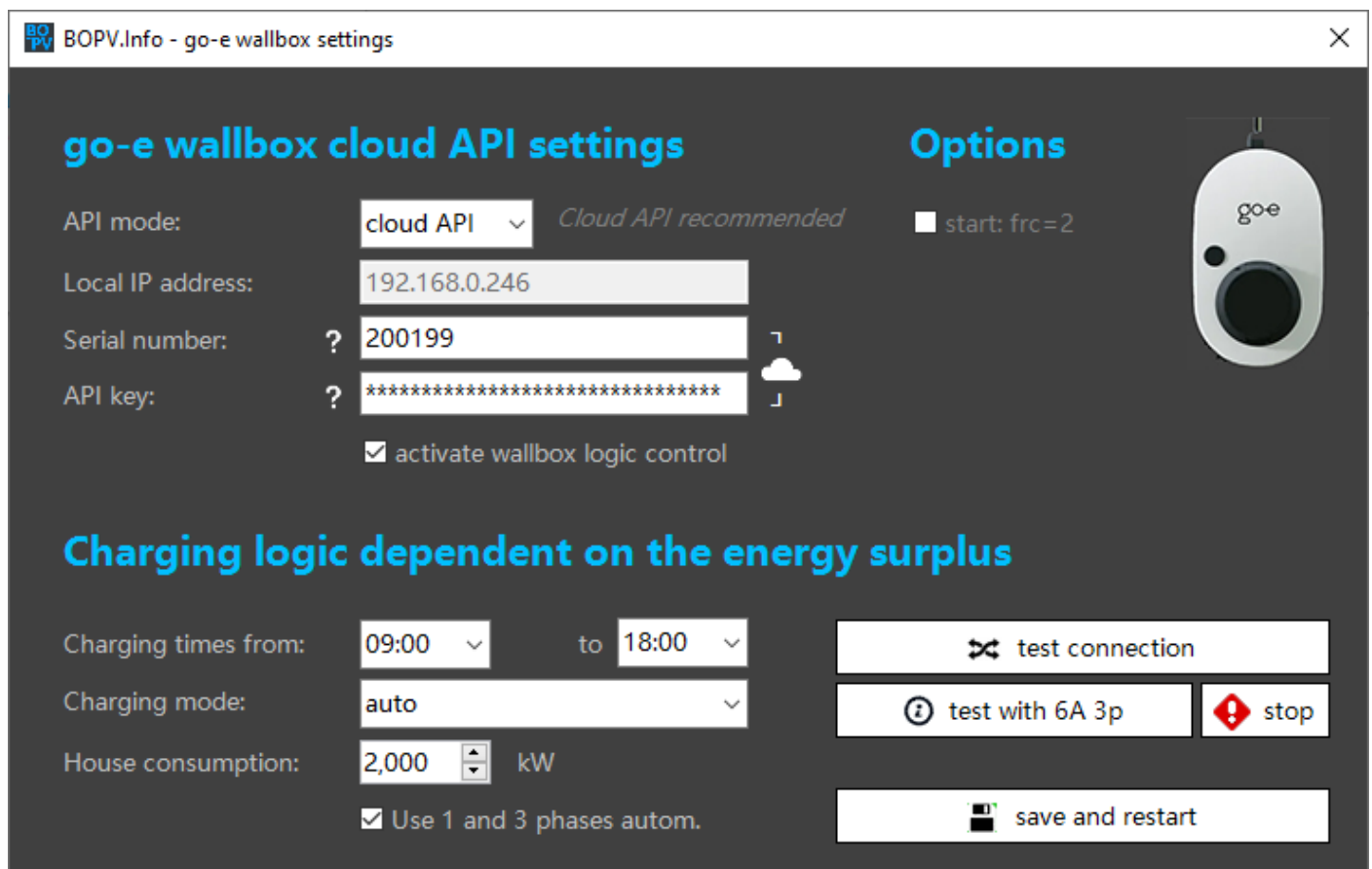
You can choose three modes:

"fix" = starts the charging process in the specified time with the specified amps and the set phases

"auto" = starts the charging process in the specified time if there is enough energy surplus. The basic house consumption is taken into account, which should always remain available in any case. Depending on the energy surplus, the wallbox charges from 6A 1-phase to 16 amperes 3-phase.

"auto conservative" = like "auto", but always 1 amp less

Use "test connection", "test with xA xp" and "stop" to check the connectivity of the wallbox.

A screenshot of the 'BOPV.Info - go-e wallbox settings' web interface. The page has a dark theme. At the top, there's a title 'go-e wallbox cloud API settings' and a section 'Options' with an image of a go-e wallbox. The 'API mode' is set to 'cloud API' (marked as recommended). Below are input fields for 'Local IP address' (192.168.0.246), 'Serial number' (200199), and 'API key' (masked with asterisks). There's a checkbox for 'activate wallbox logic control' which is checked. The 'Charging logic dependent on the energy surplus' section includes 'Charging times from' (09:00) to '18:00', 'Charging mode' (auto), and 'House consumption' (2,000 kW). At the bottom, there are buttons for 'test connection', 'test with 6A 3p', 'stop', and 'save and restart'. A checkbox for 'Use 1 and 3 phases autom.' is also present.



## myStrom Switch

The myStrom Switch can be reached via a local IP address. In the Manufacturer APP, you need to disable local authentication.

The switch is activated within the specified time as soon as sufficient energy surplus is available for the connected consumer. In the screenshot example, the myStrom switch switches on as soon as more than 5.5 kW of energy comes from the PV system. Under "Power consumption" you enter the connection value of the connected consumer. Under "House consumption" you specify how much kW should remain for the basic house consumption after activation of the switch.

With "Get consumption data" you can check how much power the connected device needs. To do this, switch on beforehand with "Switch on".

BOPV.Info - myStrom switch

myStrom WIFI Swicht API settings

Local IP address:

192.168.0.232

☐ activate mySwitch logic control

Switching logic dependent on the energy surplus

Charging from:

11:00

to:

16:00

Power consumption:

3,500

kW

House consumption:

2,000

kW

Get consumption data

Switch on

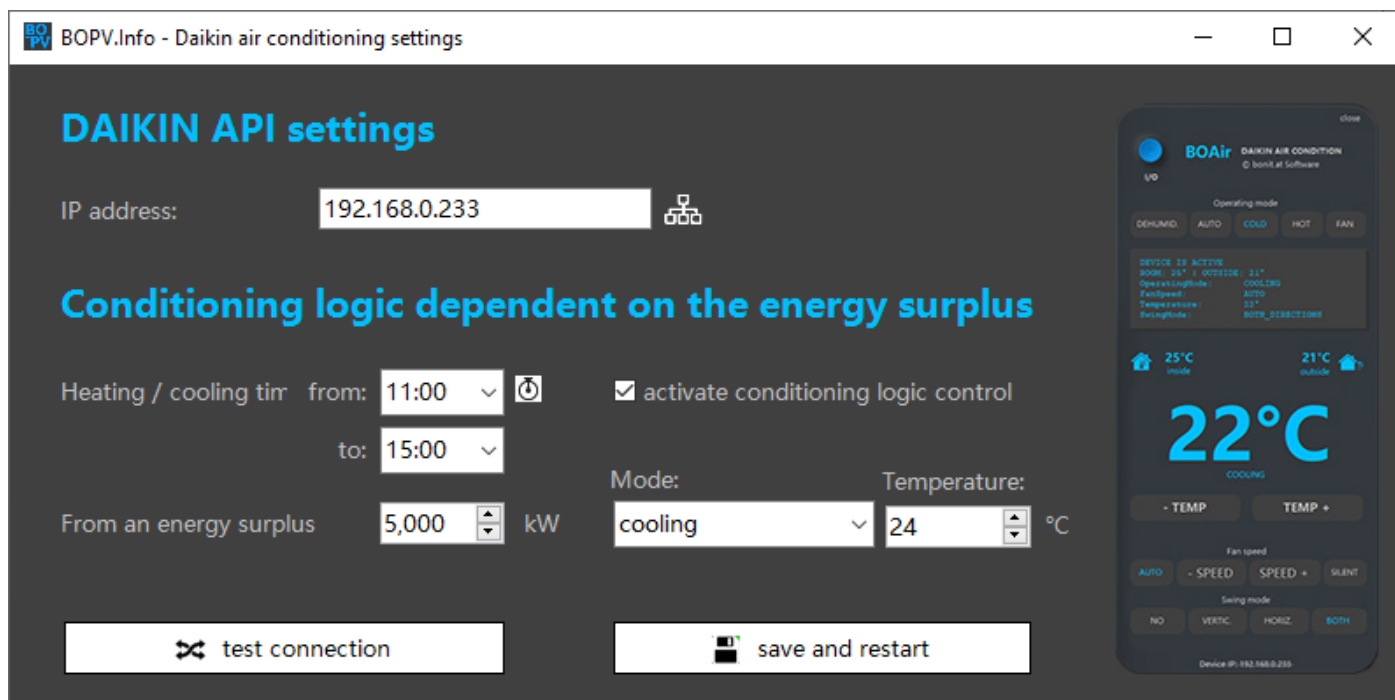
Switch off

save and restart

## DAIKIN air conditioning as excess consumer

As soon as you have installed the WLAN adapter in your DAIKIN air conditioning system, you can reach it via IP address. Not all DAIKIN air conditioners support the local API – please test it.

In the example screenshot, the air conditioning system is started within the specified period in "cool 24 degrees" mode as soon as more than 5 kW are supplied by the PV system.



**DAIKIN API settings**

IP address: 192.168.0.233

**Conditioning logic dependent on the energy surplus**

Heating / cooling time: from: 11:00 to: 15:00

From an energy surplus: 5,000 kW

Mode: cooling Temperature: 24 °C

☒ activate conditioning logic control

test connection save and restart

**BOAIR** DAIKIN AIR CONDITIONING

Operating mode: DEHUMID AUTO COOL HOT FAN

DEVICE IS ACTIVE

ROOM: 25°C OUTSIDE: 21°C

Operating mode: COOLING

Fan speed: AUTO

Temperature: 22°C

25°C inside 21°C outside

22°C COOLING

- TEMP TEMP +

Fan speed: AUTO - SPEED SPEED + SILENT

Swing mode: NO VERTIC HORIZ BOTH

Device IP: 192.168.0.233

In the Plant Details you can see which surplus consumers are currently active or inactive. You can also double-click on the respective entries and get to the settings here as well.

Active power to grid	4,082 kW		
MPPT DC power	4,235 kW	max	19,390 kW ⚡
Smart Power Sensor	not connected		
Battery	not connected		
DAIKIN surplus	cooling 24°C	11:00-15:00	off ⚙
Wallbox surplus	2,07 kW 9A 1p	09:00-18:00	on ⚙
myStrom surplus	3,500 kW	11:00-16:00	off ⚙
After surplus	2,012 kW		

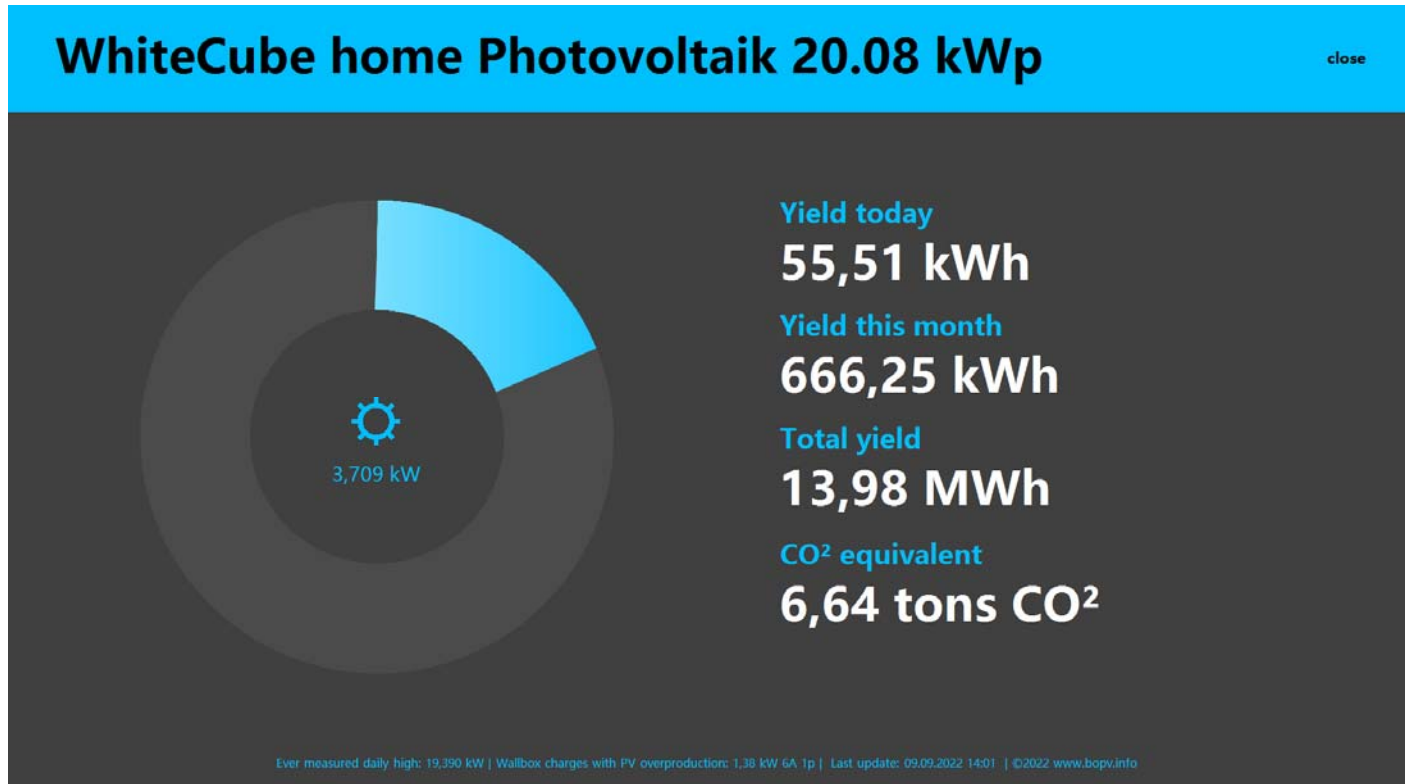
## Note on the accuracy of excess charges

Since the data in the Huawei FusionSolar Cloud is only updated every 5 minutes, the excess charge is not accurate to the second and also not exact. If you have connected a LUNA battery, it compensates for the inaccuracies in any case. If not, then you have to calculate more or less network reference depending on the setting. In any case, excess loading over BOPV.Info is a profit. Surplus functions can only be used with the API!

## KIOS mode (presentation mode)

You can start kiosk mode from the widget Context Menu.

For multi-screen users: The KIOS mode always starts in the screen in which the widget was started. If you want to use a different screen for the presentation, move the widget there, close it with "Exit" and then restart it. Then the KIOSK mode opens in the same screen as the widget.



## Command line parameters

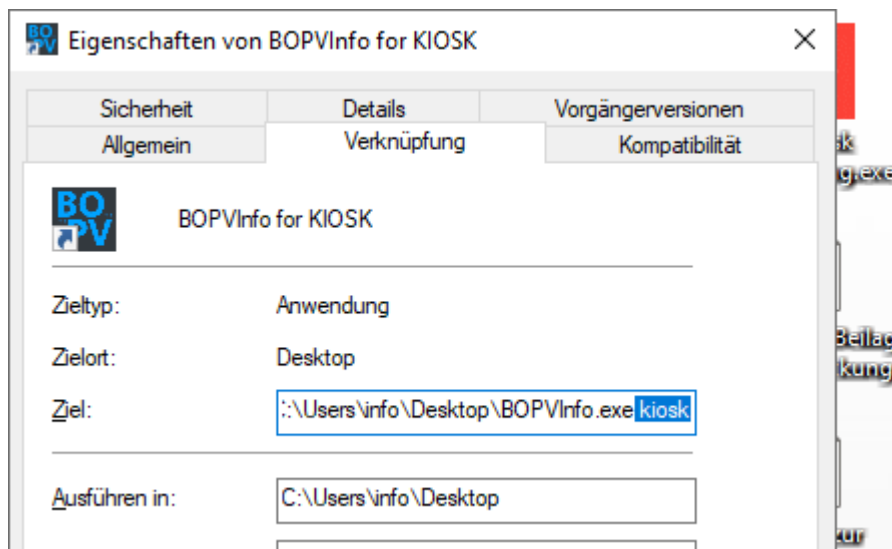
Optional: Create a link to the application and specify the following parameters in the shortcut:

"kiosk" = starts immediately in kiosk mode

"reset" = resets screen positions of widget and plant details

"demo" = hides the plant name (e.g. for screenshots for sharing).

"PLAYGROUND" = starts immediately in playground mode

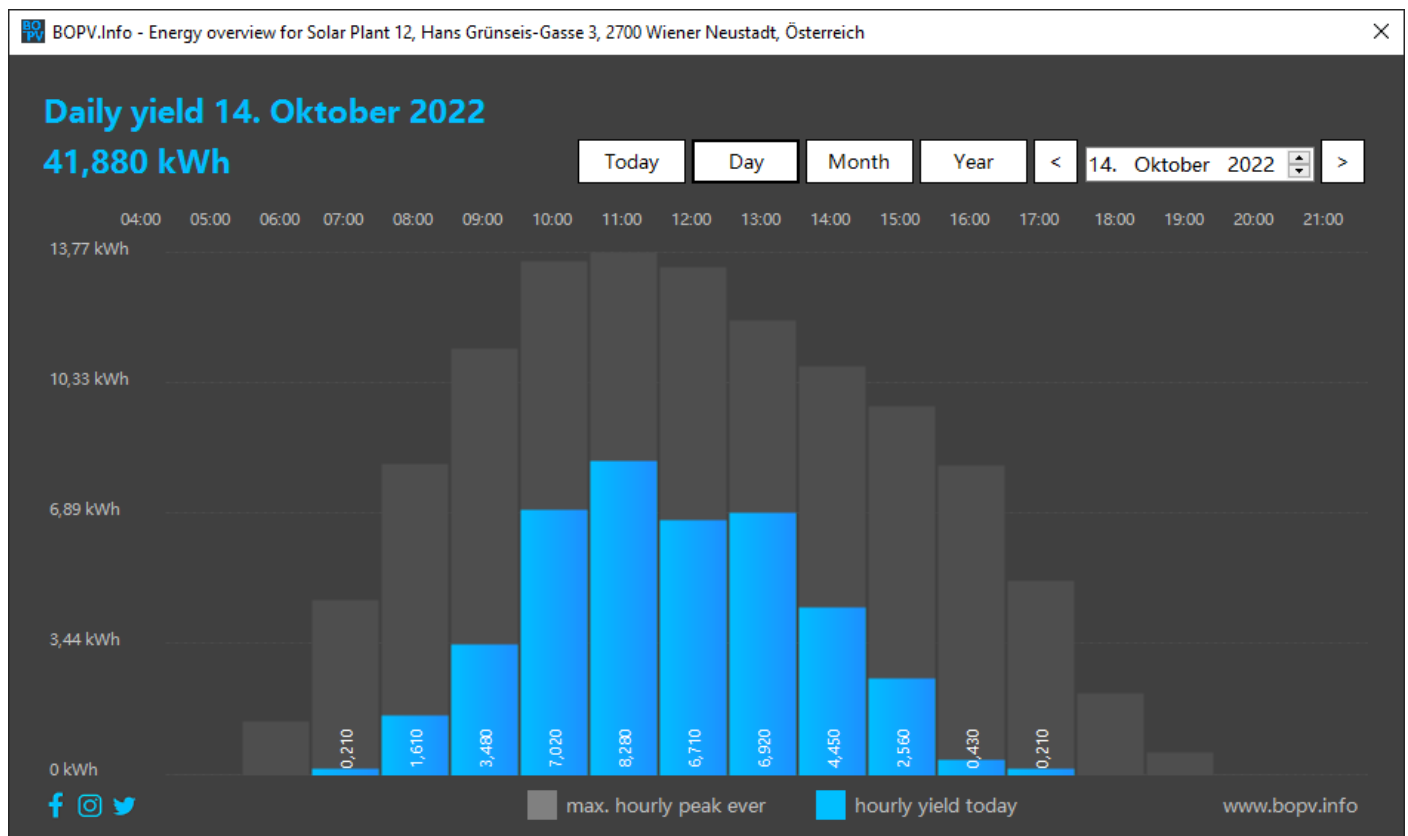




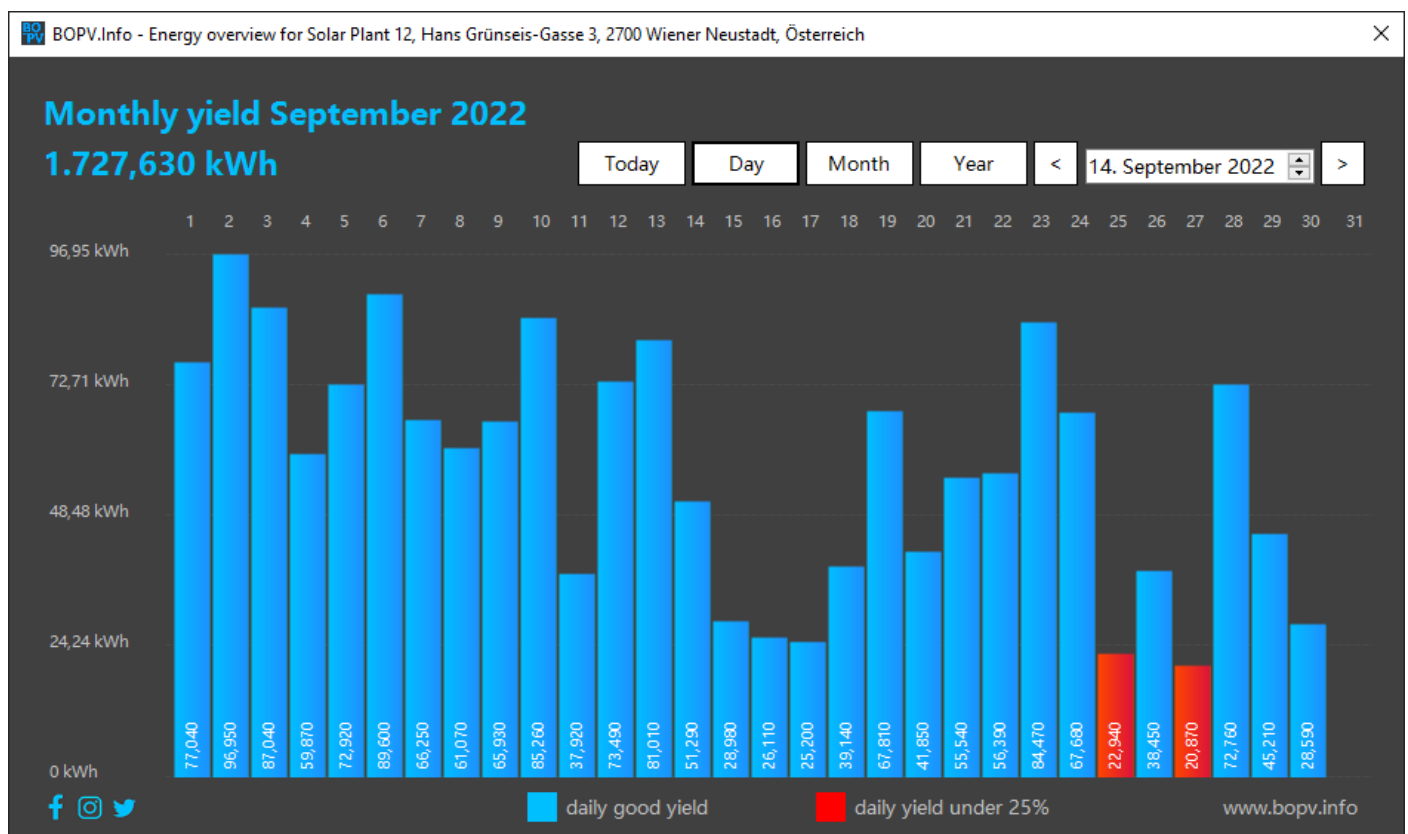
## Yield overview

Via the widget menu > "Yield overview" you get to the yield overview where you can retrieve the yield data of your solar plant for every hour, every day and every month.

In the day view, the maximum hourly values of the most productive days of the system are displayed in dark gray bars for comparison.



In the month view, below-average days are displayed in red. The bars are clickable.



The year view is structured like the month view. Again, you can click on a month bar to get to the day view.



Please note that this feature only works with older API accounts. For new API accounts, you'll see a message that the 5-minute northbound option hasn't been enabled. This feature has unfortunately been blocked by Huawei for all new API users.

## Historical device data

THESE FEATURES ARE ONLY ENABLED IN API ACCOUNTS OLDER THAN JULY 2022. IN NEWER API ACCOUNTS, THIS FUNCTION ON THE PART OF HUAWEI IS UNFORTUNATELY NO LONGER AVAILABLE.

Via the widget menu > "Historical device information" you get to the historical device overview where you can retrieve and compare the daily data of inverter, battery and SmartPowerSensor.

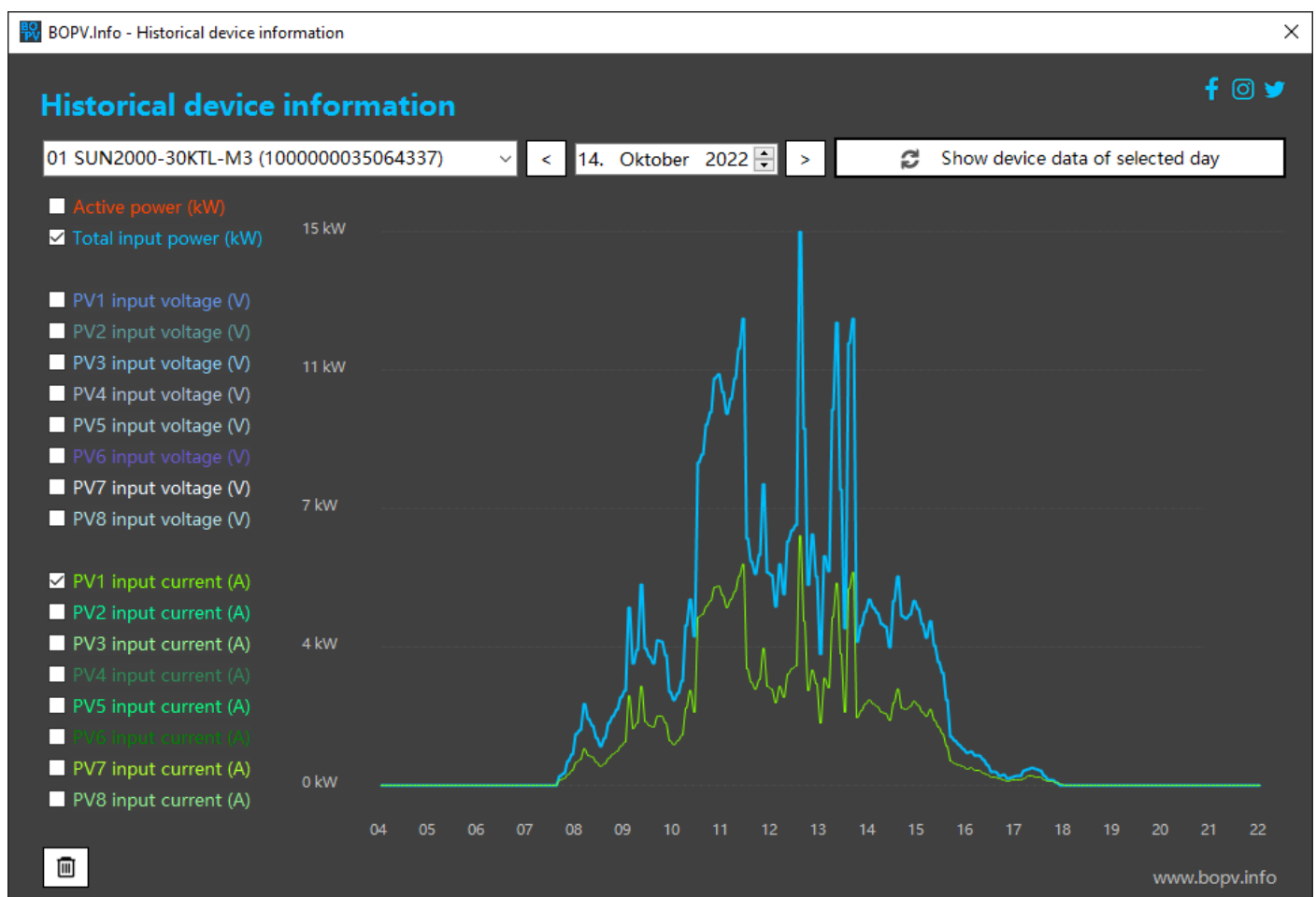
First, select the device for the evaluation in the upper left corner and then select the day. In the left column, select which data you want to see.

BOPV.Info - Historical device information

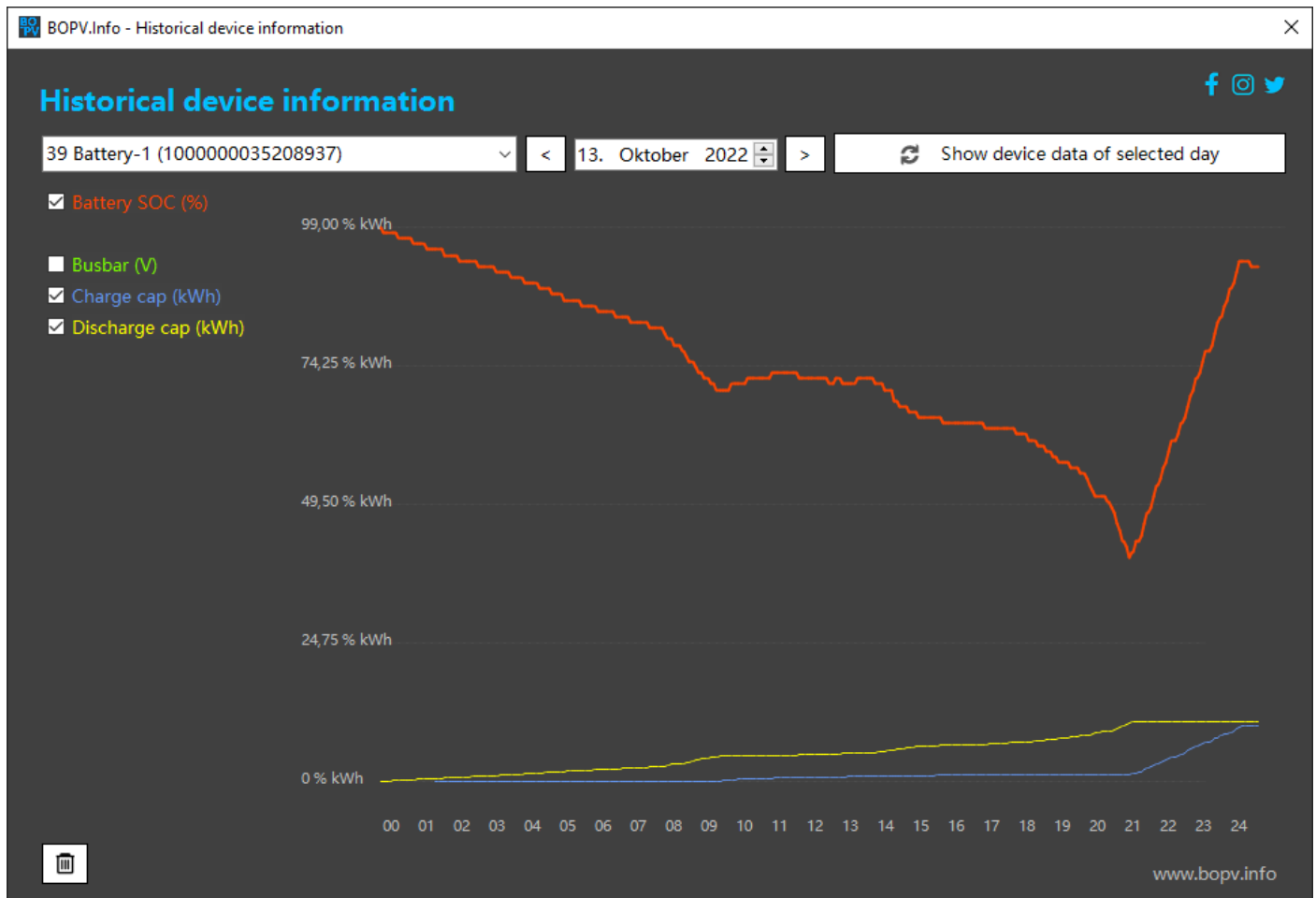
### Historical device information

Please select device > < 15. Oktobe

- 38 Inverter-1 (1000000035208935)
- 47 Meter-1 (1000000035208936)
- 39 Battery-1 (1000000035208937)



Please note that this feature only works with older API accounts. For new API accounts, you'll see a message that the 5-minute northbound option hasn't been enabled. This feature has unfortunately been blocked by Huawei for all new API users.



In the SmartPowerSensor view, you see feed-in positively and reference negatively.







To enable the Modbus Communication, go to Settings. Enter the IP address of your Wi-Fi dongle.


If you only have one inverter, activate the checkbox at "MBUS-ID inverter 1:" and enter the Modbus comm address to the right. Usually the WLAN dongle is "0" or "1" and the inverters start at "1" or "2". Click on "test" to start a test communication. If you see a message box with the inverter name, serial number and PV string data, then the connection works.

If an error message appears, it may be that the IP address or the KOMM address is incorrect or that the query has simply failed. Try several times until you get a result. If an error occurs during the query, the checkbox is automatically deactivated. You have to activate this again.

If you are using two inverters, repeat with the second line.

It may be that the sequence of inverters (if you use 2 or 3) in the device list is reversed in the plant details, then you also have to reverse the order of the comm addresses as in the screenshot above.

If you are using Windows 11 or an external firewall, make sure that Modbus port 502 has been enabled for the application on the network.

Device list		
	62	WLAN Dongle
	01	SUN2000-10KTL #2
	01	SUN2000-10KTL #1
	47	DTSU666-H (3ph)
	39	Battery 30 kWh
	46	OPTIMIZER (34 pcs)

A query can sometimes take a few seconds. You will see a small arrow in the widget to the right of the Modbus TCP logo. If this is blue, then the current query runs.



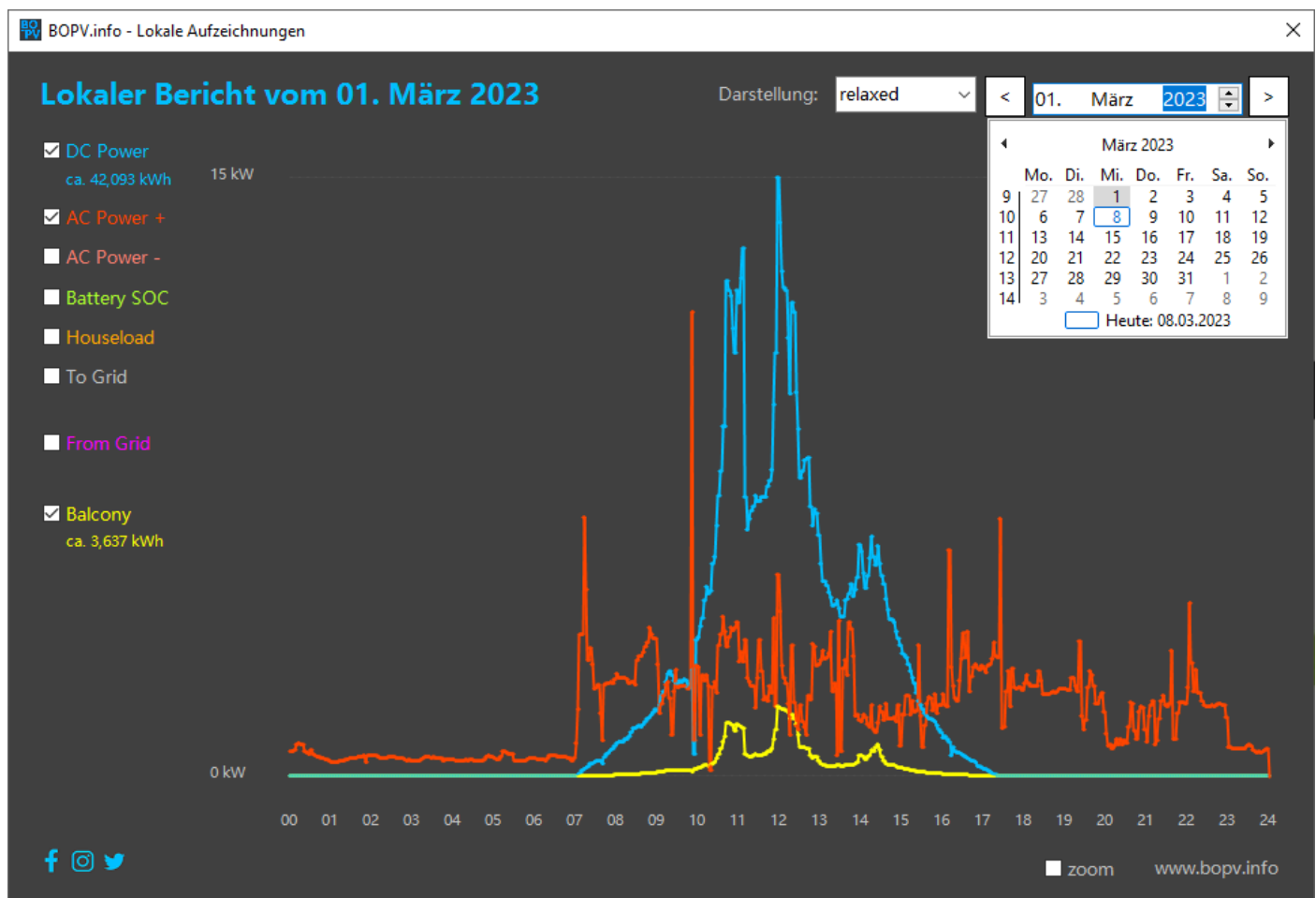
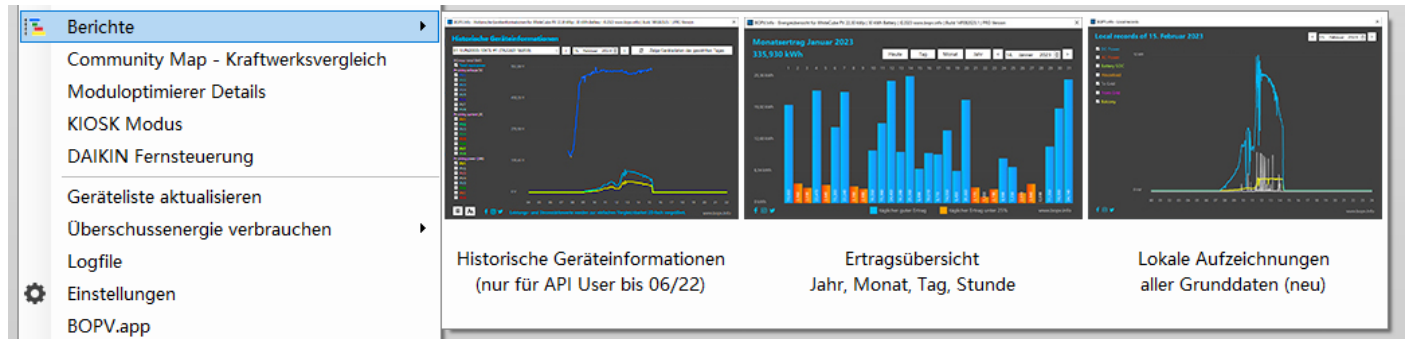
The following data is retrieved via Modbus: 8 PV strings per inverter (amps, volts), MPPT DC power, Active Power to grid, PowerSensor in/out. Some additional values are calculated from this. The rest is queried via the API.

## Local Records

For all those users who do not receive 5-minute data from the API user and also for those users who only query the inverter via Modbus, we have integrated a local reporting system.

Whenever the BOPV.Info application is running, it records all relevant data locally on disk. This data can then be clearly displayed. To do this, call the "Local Recordings" function in the Reports menu.

The function itself is self-explanatory:



## Yield and Energy Cost Calculator

In this table you can enter the monthly PV yield, feed-in, grid consumption and electricity prices. As a result, you will receive a detailed listing for each year.

In our other application "Private Construction Manager" ([www.priconman.com](http://www.priconman.com)) this function is also available, but there with additional electricity price calculator and extensive printing options.

Like Private Construction Manager, this feature is only available in German.

BOPV.Info - Ertrag- und Kostenrechner

Ertrag- und Kostenrechner

Eingaben: PV-Ertrag, Einspeisung, Netzbezug, Strompreise

Auswertung für 2022 anzeigen

10-jahres Auswertung ab 2022

Stromkosten berechnen

Jahr: < 2022 >

Jahr	Monat	Produktion kWh	Hausverbrauch kWh	PV-Verbrauch kWh	Einspeisung kWh	Netzbezug kWh	Bezugspreis Euro	Verkaufspreis Euro	Sonderausgaben Euro
2022	Januar	0,00	0,00	0,00	0,00	0,00	0,000000	0,000000	0,00
2022	Februar	0,00	0,00	0,00	0,00	0,00	0,000000	0,000000	0,00
2022	März	0,00	0,00	0,00	0,00	0,00	0,000000	0,000000	0,00
2022	April	2.178,20	2.575,29	1.649,29	528,91	926,00	0,269600	0,000000	0,00
2022	Mai	2.896,76	1.658,92	1.216,92	1.679,84	442,00	0,269600	0,000000	0,00
2022	Juni	3.030,65	2.006,62	1.631,62	1.399,03	375,00	0,291790	0,000000	0,00
2022	Juli	2.989,70	1.761,93	1.361,93	1.627,77	400,00	0,317320	0,307290	0,00
2022	August	2.320,35	1.400,04	898,04	1.422,31	502,00	0,342351	0,307290	0,00
2022	September	1.727,63	1.098,72	676,97	1.050,66	421,75	0,367578	0,307290	0,00
2022	Oktober	1.033,45	816,47	446,55	586,90	369,92	0,451538	0,514500	0,00
2022	November	492,70	1.222,45	484,84	7,86	737,61	0,501329	0,514500	0,00
2022	Dezember	341,76	1.767,68	338,20	3,56	1.429,48	0,529744	0,514500	0,00
2022	GESAMT	17.011 kWh	14.308 kWh	8.704 kWh	8.307 kWh	5.604 kWh	2.226,12 €	1.567,95 €	0,00 €

Eintrag oben wählen:

0,00

0,00

0,00

0,000000

0,000000

0,00

An Energieversorger bezahlt € 658,17

Verbrauchte Energie hätte € 5.087,26 gekostet.

[Druckbare Auswertungen und PV-Amortationsberechnung sind mit dem Private Construction Manager möglich \(www.priconman.com\)](#)

(available in german language only)

www.bopv.info

## BOPV.app

Recently, it has been possible to send the BOPV.info's data to the cloud and retrieve it via a web app on any browser anywhere in the world. The advantage over FusionSolar is that the app is much easier to call up and starts much faster and that the data (with Modbus access) is only about 40 seconds old. With FusionSolar, the data is at least 300 seconds (5 minutes) old. This feature is only available in the PRO version!

## Configuration

BOPV.info - BOPV.app

## BOPV.app - Deine lokalen Daten mobil verfügbar

Login:  Mindestens 10 Buchstaben oder Zahlen, keine Sonderzeichen oder Leerzeichen.

Passwort:  Mindestens 10 Buchstaben oder Zahlen, keine Sonderzeichen oder Leerzeichen.

☒ automatische Uploadfunktion aktivieren

☒ LUNA2000 installiert ☒ DTSU666-H installiert

Balkon Label:

App URL: <https://www.bopv.info/bopvapp>

## Funktionsweise

Dies ist eine Funktion mit der Du Deine lokal ermittelten Daten auch unterwegs auf dem Smartphone, iPad oder jedem anderen Gerät mit integriertem Webbrowser abfragen kannst.

Definiere ein mindestens 10-stelliges Login und Passwort (ohne Leerzeichen oder Sonderzeichen) und aktiviere die Funktion. Dann klicke auf 'Grundeinstellungen und aktuelle Daten hochladen'. Danach kannst Du Dich über die App-URL <https://www.bopv.info/bopvapp> an jedem Browser einloggen und Deine aktuellen Daten ansehen.

Nur in der PRO Version verfügbar!

[www.bopv.info](https://www.bopv.info)

Start the configuration via the context menu "BOPV.app". Define your own login and password. These must be at least 10 characters long and may contain only letters and numbers, but not spaces or special characters.

Activate "Enable automatic upload function" and check LUNA2000 or DTSU666-H if you have a battery and/or smart meter installed. If you have set FRONIUS GEN24 as the data source, then LUNA2000 counts as battery and DTSU666-H as smart meter.

Define a name for the optimal balcony power plant (if you have one installed).

With "Upload basic settings and current data" you upload the data to the BOPV server and the website with the data or login appears.

## Functionality

When activated, the BOPV.Info sends its collected real-time data to the server on [www.bopv.info](http://www.bopv.info) (server location IONOS Germany) every few seconds.

The web app reads the data and displays it clearly.

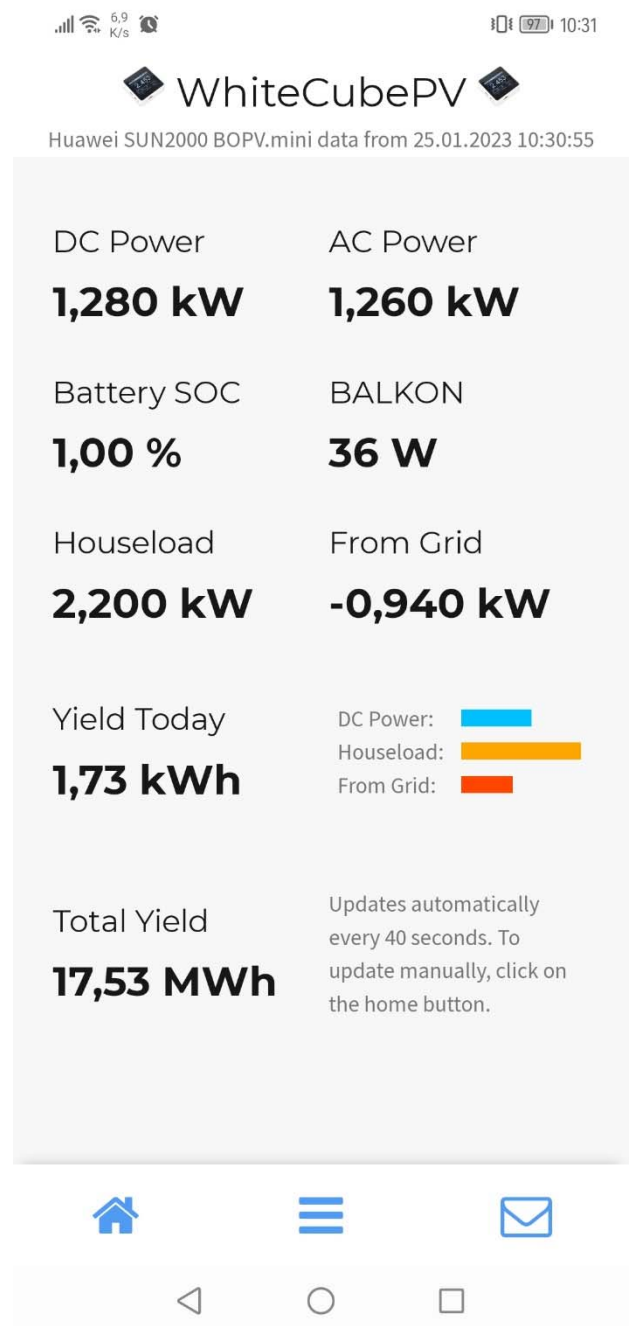
The address for the web app is:

<https://www.bopv.info/bopvapp>

Simply log in to the web app once with the access data stored in configuration – done.

The web app runs on all smartphones, tablets and computers. Whether Android, iOS, Apple, Linux or Windows.

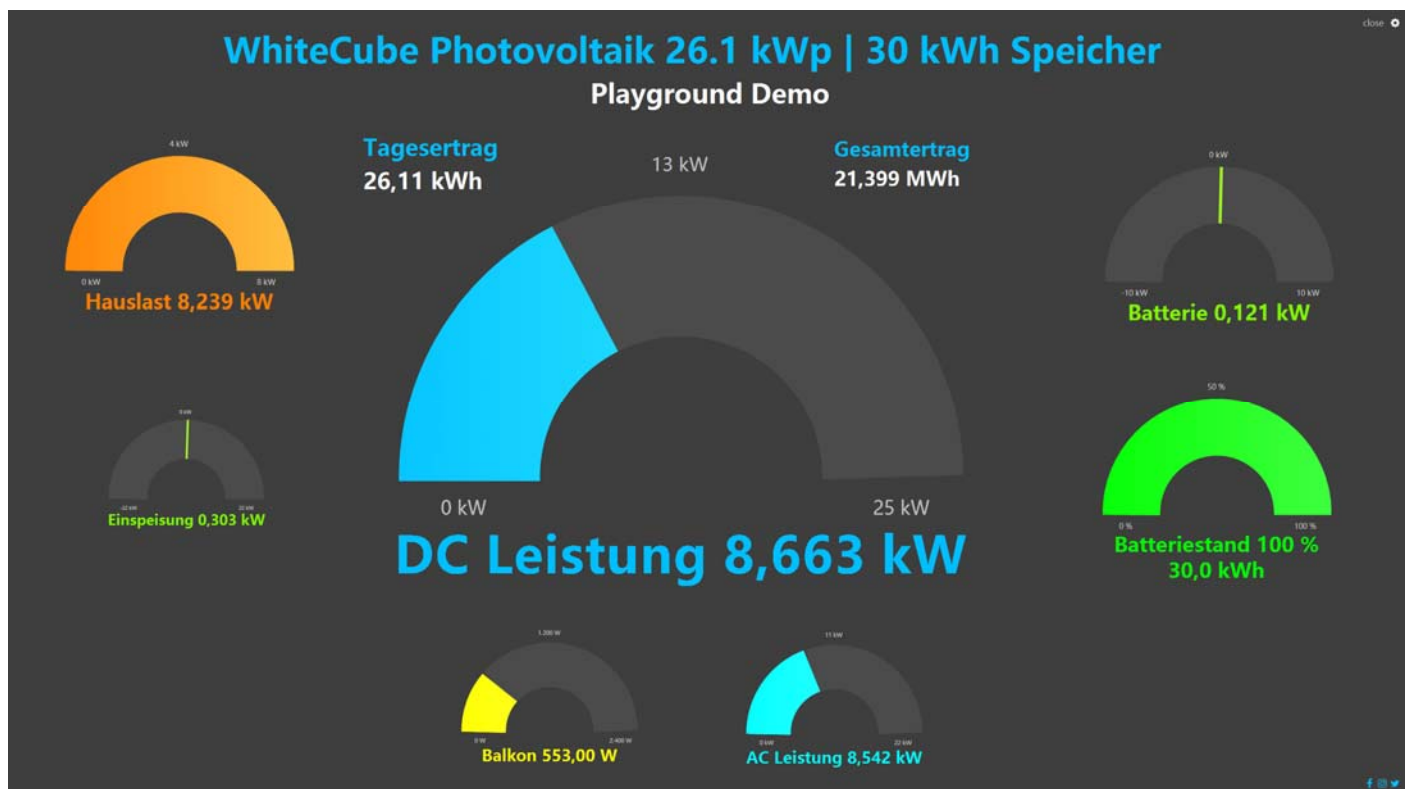
Caution: BOPV.mini and BOPV.Info use different app URLs with different databases.





## Playground

You can start the playground mode via the widget context menu. The Playground is an alternative KIOSK view. Here you can position the values arbitrarily.



By clicking on the gear symbol in the upper right corner you start the editor mode. You can change the labels, colors and max values of the individual elements as you like. With the left mouse button pressed you can change the position of all elements (values, texts). With the mouse wheel you change the size of the elements.

### Playground Settings

Item	Label	Color	Max. Value	Size
<input checked="" type="checkbox"/> DC Power	DC Leistung	<span style="background-color: #00bfff; border: 1px solid #00bfff; display: inline-block; width: 20px; height: 10px;"></span>	25 kW	1292
<input checked="" type="checkbox"/> AC Power	AC Leistung	<span style="background-color: #00ffff; border: 1px solid #00ffff; display: inline-block; width: 20px; height: 10px;"></span>	22 kW	404
<input checked="" type="checkbox"/> Battery SOC	Batteriestand	<span style="background-color: #00ff00; border: 1px solid #00ff00; display: inline-block; width: 20px; height: 10px;"></span>	100 %	524
<input checked="" type="checkbox"/> Battery Load	Batterie	<span style="background-color: #ffa500; border: 1px solid #ffa500; display: inline-block; width: 20px; height: 10px;"></span>	10 kW	524
<input checked="" type="checkbox"/> Grid	Einspeisung	<span style="background-color: #90ee90; border: 1px solid #90ee90; display: inline-block; width: 20px; height: 10px;"></span>	22 kW	356
<input checked="" type="checkbox"/> Houseload	Hauslast	<span style="background-color: #ffa500; border: 1px solid #ffa500; display: inline-block; width: 20px; height: 10px;"></span>	8 kW	524
<input checked="" type="checkbox"/> Balcony PV	Balkon	<span style="background-color: #ffff00; border: 1px solid #ffff00; display: inline-block; width: 20px; height: 10px;"></span>	2400 W	404
<input checked="" type="checkbox"/> Yield Today	Tagesertrag			
<input checked="" type="checkbox"/> Total Yield	Gesamtertrag			

Background Color:  Marker Color:

Main Title: WhiteCube Photovoltaik 26.1 kWp | 30 kWh Speicher

Sub title: Playground Demo

Own Image:

Usage: size = mousewheel, position = mousedrag

## Closing remarks

The manual is deliberately kept short and crisp in order not to bore the users. BOPV.Info is self-explanatory in many points, so long explanations in the manual are omitted. If you have questions, simply login to the Facebook group and exchange ideas with other users. Of course, I also answer myself:

<https://www.facebook.com/groups/1160839111137832>

All functions described in this manual are included in the functional scope. Other functions that you will find in the application are not part of the purchase version and could change at any time.

## Legal, Disclaimer

Options that are not described in the manual are also not officially included in the range of functions.

Use of this software is at your own risk. There is no entitlement to support. Neither in the TRIAL version nor in the PRO version. Please test the TRIAL version extensively before you buy the PRO version.

The functions of BOPV.Info are heavily dependent on the Huawei Northboud API. If Huawei changes important API queries or limits them, this is not a reason for a complaint. Even if the software becomes partially or completely unusable as a result. It's the same with Huawei's Modbus feature.

## Troubleshooting

If the application does not start at all after installation, then either the .NET Framework 4.8 is missing, a Windows Update is waiting for the restart or the .NET settings are corrupted. If the .NET settings are corrupted, please delete the following file and then restart and reconfigure BOPV.Info:

C:\Users\info\AppData\Local\bonit.at\_Software\_OG\BOPVInfo.exe\_Url\_3pdw4sftq0tao0iu3vjd1ylbj2rumqoo\1.0.0.0\user.config

Yellow = replace by your user

Green = can be different

[www.bopv.info](http://www.bopv.info)

bonit.at Software OG  
Roland Berghöfer  
Hans Grünseis-Gasse 3  
2700 Wiener Neustadt