

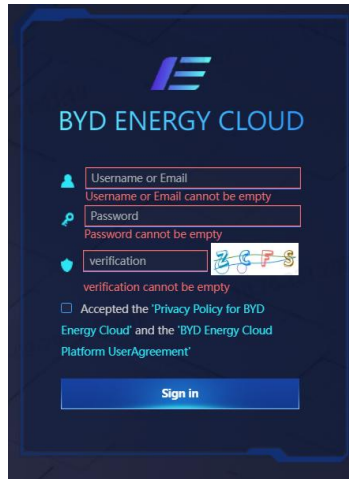


PV Configurator Quick Start Guide

1 Log in

The installers log in according to the following steps:

- (1) Installers enter the website address: <https://energyhousehold.bydessys.com/#/home/index>
Backup website address: <https://energyhousehold.westeurope.cloudapp.azure.com/#/login>
- (2) Enter your account and password of **BYD Energy APP**.
- (3) Click **Sign in** to access the **BYD Energy Cloud**.



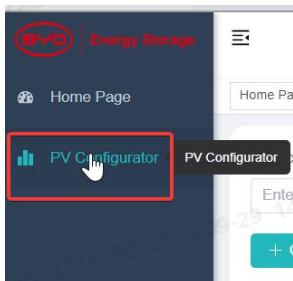
The image shows the login page of the BYD Energy Cloud system. It features a dark blue background with the BYD Energy Cloud logo at the top. Below the logo, there are three input fields: 'Username or Email', 'Password', and 'verification'. Each field has a corresponding icon (a triangle, a key, and a heart) and a red error message below it: 'Username or Email cannot be empty', 'Password cannot be empty', and 'verification cannot be empty'. There is also a checkbox for 'Accepted the 'Privacy Policy for BYD Energy Cloud' and the 'BYD Energy Cloud Platform UserAgreement''. A blue 'Sign in' button is located at the bottom of the form.

- (4) Click **After-sales service** to access the main system of **PV Configurator**.



2 Quick design

Click **PV Configurator** to enter the project management page.



Click **Quick design** + Quick design to design the project.

2.1 Entering basic info

Enter the **Project name**, **Location info** and **Load info**.

Click **Next** to save the settings.

Notice
• If you select Enter annual electricity consumption only, only the Annual electricity consumption is needed to enter. • If the City where the PV system is to be installed is not among the options, you can choose a neighbouring one. In fact, the solar radiation energy is affected by the latitude and longitude rather than the City. • Ensure the accuracy of the Latitude and Longitude. The information of the address can be obtained by querying on Google Maps or online.

2.2 PV model design

Click **PV model** to set PV module information, such as manufacturer and model.

- Select the **manufacturer** and **model** of a PV model.
- Click **OK** to save the information.

Notice
• Click ★ to add this PV model to Frequently used PV model. • Click Customize PV model to add a customized PV module model to Frequently used PV model. • Click Frequently used PV model to select a frequently used PV module model.

Set PV array name and maximum panel count of PV array.

- Click **Add** to add PV array, and set PV array value.

PV array quantity:2

Add

No.	Array name	Azimuth*	Tilt*	Energy factor	Maximum panel count	Planned panel count	Planned PV capacity	Planned annual energy production	Actions
1	PV array 1	10	38	1077	20	20	10.00 kWp	10770.00 kWh	Edit Delete
2	PV array 2	-10	38	1080	5	5	2.50 kWp	2700.00 kWh	Edit Delete

Notice

- You can **Add**, **edit**, and **delete** PV arrays in the PV array list. A maximum of six PV arrays can be configured.

2.3 Inverter design

Click to select the **Inverter type**, **Inverter AC power** and the number of **Inverters in parallel** based on site requirements.

Click **PV array** to select the name of PV array.

Enter **Strings** to indicate the number of PV strings per MPPT.

Enter **Modules/String** to indicate the number of PV modules per PV string.

Click **Calculate and check** to output calculation results and configuration details.

Click **Next** to save the settings.

PV array

PV array 1:17/20 (20) PV array 2:0/5 (5)

Configuration details

System DC/AC ratio: 106.25% Total PV panels: 17.00 Total PV capacity: 8.50kWp Annual energy production: 9154.50kWh

Calculate and check

DC/AC ratio: 106.25% Nominal DC power < 12kW PV capacity: 8.50kWp

MP PT	PV array	Strings	Modules/ String	PV peak power (kWp)	Startup voltage (V)	Maximum input voltage (V)	Normal PV voltage (V)	Maximum input current (A)	Maximum short-circuit current (A)
1	PV array 1	1	9	4.5	180.00	430.65	329.76	13.65	14.63
2	PV array 1	1	8	4	180.00	382.80	293.12	13.65	14.63

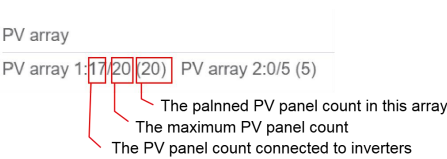
Notice

- When the PV and inverter configurations are incompatible, corresponding color indicators will appear (green indicates compatibility, red indicates incompatibility).
- Different MPPT controllers can be connected to the same PV array.

The significance of **PV array** and **configuration details** information:

- DC/AC ratio:** displays ratio of PV rated DC power to the inverter AC output power.
- Nominal DC power:** displays the maximum DC input power of this inverter.
- PV capacity:** displays the actual DC power of the PV modules in this inverter.

- **System DC/AC ratio:** displays ratio of all PV rated DC power to inverters AC output power.
- **Annual energy production:** displays theoretical energy yield (including the actual energy yield and curtailed PV energy).
- **PV array:**



2.4 Battery design

Click to select the **Battery type** based on site requirements and **inverter type**.

If you choose the **Single-phase high-voltage inverter** or **three-phase high-voltage inverter**, you can select from the following four options (**HVB**, **HVE**, **HVS+**, **HVM+**).

- Click **Single tower capacity** and **Battery towers**.

If you choose the **single-phase low-voltage inverter**, you can select **LV 5.0+**.

- Enter **Packs** to indicates the number of battery packs.

2.5 Generating a report

The report includes project name, **Energy management**, **System configuration** and **PV connection**.

- Click **Download as PDF** and generate a report.
- Click top right corner  to return to the project management page.

Notice
• If the PDF of report is incomplete, you can reduce the proportion of the web page. • The simulation data provided by this product is for reference only. • PV simulation data source: EU,PVGIS(JRC).



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