



KS Quote

# User Manual

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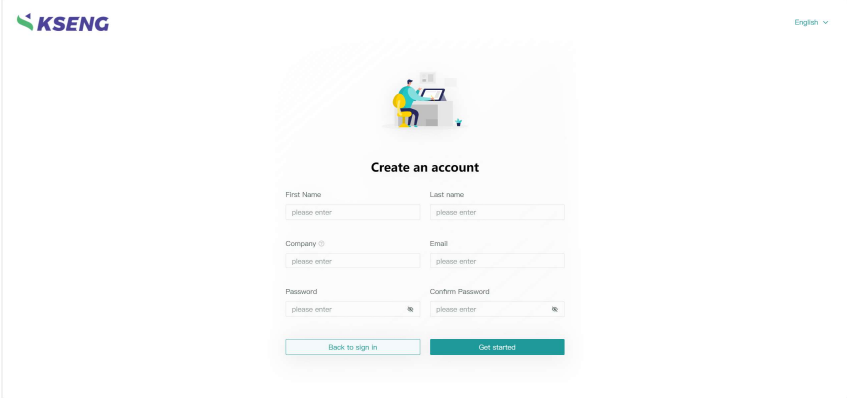
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# 1 Register and Start

## 1.1 Signing up for KS Quote

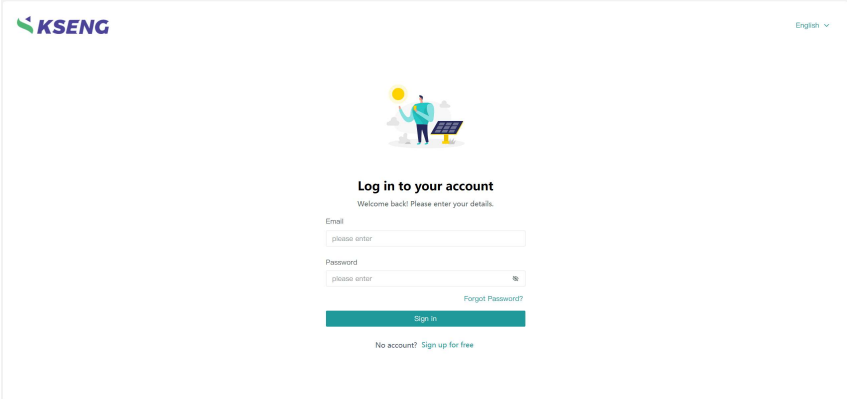
- Start your web browser and go to **kseng.solarapid.com**.
- In the Login window using the button **[Sign up for free]**.
- Complete sign-up form.
- Click on **[Get started]**. You will receive a confirmation by e-mail.
- Open the e-mail and click on the activation link.



The screenshot shows the 'Create an account' form on the KSENG website. The form is titled 'Create an account' and includes the following fields: First Name, Last name, Company, Email, Password, and Confirm Password. Each field has a 'please enter' placeholder. There are also 'Back to sign in' and 'Get started' buttons at the bottom of the form. The KSENG logo is visible in the top left corner, and 'English' is in the top right corner.

## 1.2 Starting KS Quote

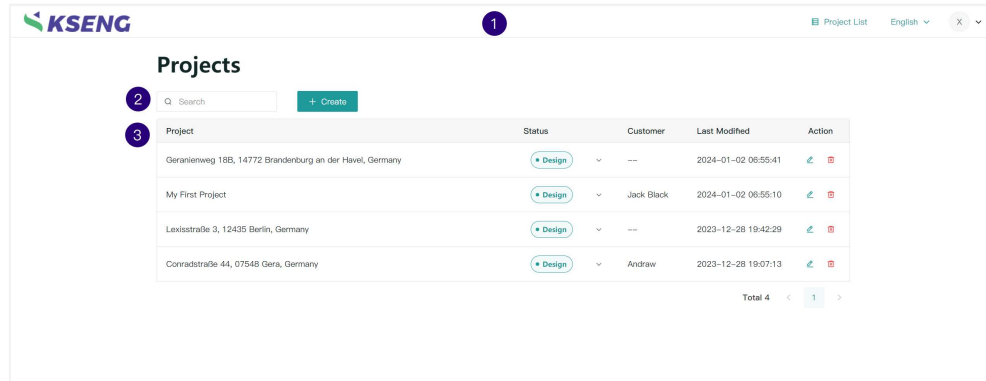
- Start your web browser and go to **kseng.solarapid.com**.
- In the Login window, sign in with your e-mail address and the password of your account.



The screenshot shows the 'Log in to your account' form on the KSENG website. The form is titled 'Log in to your account' and includes the following fields: Email and Password. Each field has a 'please enter' placeholder. There is a 'Forgot Password?' link next to the Password field. There is a 'Sign in' button at the bottom of the form. Below the button, there is a link that says 'No account? Sign up for free'. The KSENG logo is visible in the top left corner, and 'English' is in the top right corner.

## 2 Project List

The project list is displayed after you have logged in.

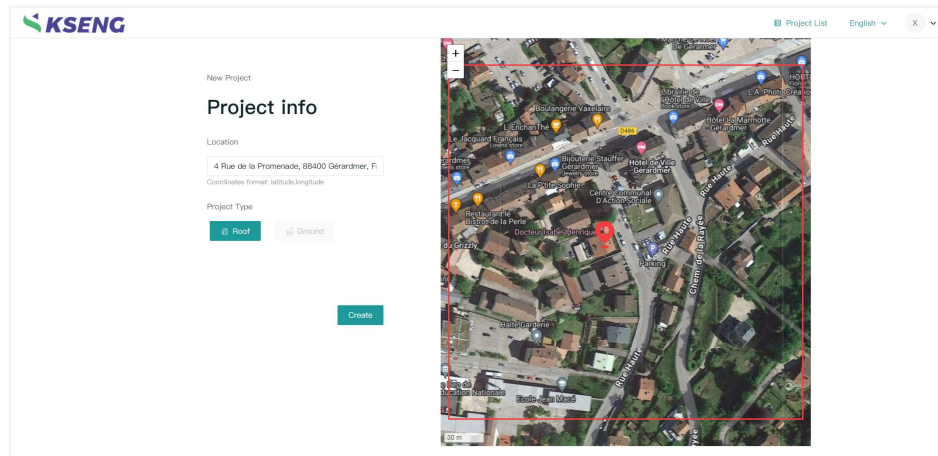


	Position	Explanation
1	Header	<p>The following functions are available here:</p> <ul style="list-style-type: none"> <li>• Back to <b>Project List Page</b></li> <li>• Language selection</li> <li>• Click the avatar, you can go to <b>Console Page</b>, or log out.</li> </ul>
2	Operation	<ul style="list-style-type: none"> <li>• Search an existing project</li> <li>• Create new project</li> </ul>
3	Table	<ul style="list-style-type: none"> <li>• Click on <b>[Edit]</b> to open a project</li> <li>• Click on <b>[Delete]</b> to delete a project</li> <li>• Click on status trigger to change the project status</li> </ul> <p>Status includes: <b>Design, Complete, Realized</b></p>

### 3 Project Design Pages

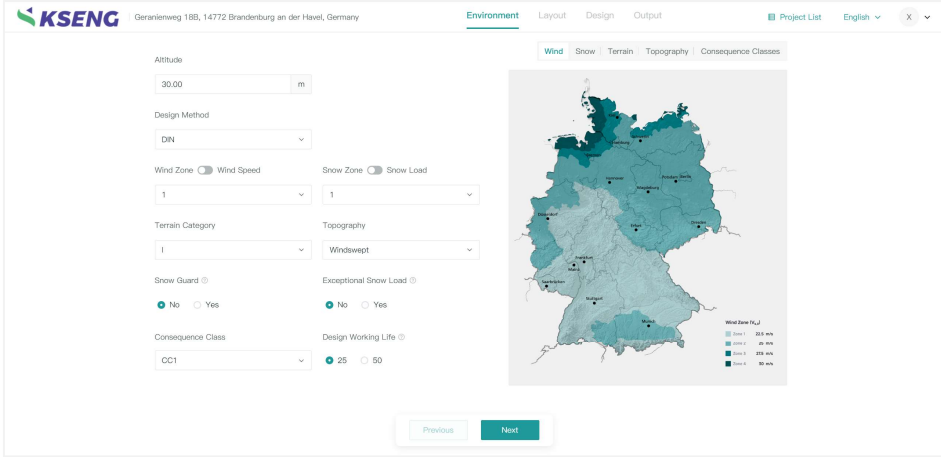
#### 3.1 Create New Project

- Click on [Create] in the **Project List Page**.
- Create a new project step by step.



Procedure	Description
1	<p>Confirm Location</p> <ul style="list-style-type: none"> <li>• Type in the project address and verify that the pin on the satellite view is on top of the correct building.</li> <li>• Or type in the latitude and longitude to ascertain the project location.</li> <li>• Make sure that the entire project site is visible in the frame.</li> </ul>
2	<p>Choose Project Type</p> <ul style="list-style-type: none"> <li>• Choose the project type.</li> <li>* Currently, the selection is limited to "Roof" only.</li> </ul>
3	<p>Create</p> <ul style="list-style-type: none"> <li>• Click on [Create].</li> </ul>

## 3.2 Setting Environment Parameters



	Objection	Description
1	Altitude	The altitude data of the site is automatically obtained.
2	Design Method	Based on the project address, the design method is matched.
3	Wind Zone	Based on the illustration on the right, select the respective wind zone.
4	Wind Speed	Click the switch button to enable manual input for wind speed.
5	Snow Zone	Based on the illustration on the right, select the respective snow zone.
6	Snow Load	Click the switch button to enable manual input for snow load.
7	Terrian Category	Based on the illustration on the right, select the terrain category.
8	Topography	Based on the illustration on the right, select the topography.
9	Snow Gaurd	Select whether the roof has a snow guard or not.

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*\* Snow guards are devices used on rooftops to help snow and ice melt completely and drift off your metal roof in small amounts, rather than all at once.*

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10	Exceptional Snow Load	<p>Choose whether the project considers the exceptional snow load or not.</p> <p><i>* Load of the snow layer on the ground resulting from a snow fall which has an exceptionally infrequent likelihood of occurring.</i></p>
11	Consequence Class	<p>For the purpose of reliability differentiation, consequences classes (CC) may be established by considering the consequences of failure or malfunction of the structure as given in Table B1.</p>
12	Design Working Life	<p>Assumed period for which a structure or part of it is to be used for its intended purpose with anticipated maintenance but without major repair being necessary.</p>

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After completing the form, proceed by clicking on the **[Next]**.

### 3.3 Draw Roof Layout

On the **Layout Page** you can draw the design area and this is done for each roof section individually.

**Procedure:**

1. Click on **[Roof]** icon on the left and choose to draw a pitched roof or monopitched roof.
2. Start drawing the outline of your roof. The first line will be the eaves and drag your mouse to draw the roof shape.
3. **Set the roof properties:** set the building height, pitch angle, and

drainage direction of the roof. Drainage direction is the roof pitch direction.

4. **Set the roof structure:** Choose the appropriate roof covering material and configure the structural parameters of the roof, including Rafter Spacing, Batten Spacing, Distance to Left Verge, Distance to Right Verge (automatically calculate), Tile Height.

5. **Design the PV module arrays:** You can search the module in our database or define a module yourself.

After selecting the module, related layout parameters need to be set, including Module Orientation with options for Portrait or Landscape, Module Installation Type with Parallel or Elevated options, and entering the Min. Roof Edge Distance and Two Rows Gap.

In the advanced setting, you can customize thermal gap distribution when relevant. Enter the desired values in the fields **Column separation**, **Row separation** and **Frequency**. Frequency means how many modules per column or row should be arranged.

6. Click on [**Auto Fill**], the PV modules can be laid out on the roof.

### Draw Obstructions:

If you need to add obstructions, click on the [**Obstacle**] icon and then you can draw a polygon-shaped obstacle.

If you prefer not to draw a perpendicular line, press the shift key on the keyboard when drawing.

Set the height and edge distance of obstacle on the right parameter panel.

### Other operations:

Objective	Operation with the mouse
Changing the scaling of the display	<ul style="list-style-type: none"> <li>Use the mouse wheel to change the size of the map.</li> </ul>



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	Or
	<ul style="list-style-type: none"><li>You can change the size of the map using the buttons [+] and [-] at the upper right edge of the map</li></ul>
Show/Hide layers	<ul style="list-style-type: none"><li>Click on <b>[Layer]</b> button at the upper right edge of the map. You have the option to enable or disable layers, including length and angle annotation, PV modules, shadows of obstacles.</li></ul>
Center map on location	<ul style="list-style-type: none"><li>Click on <b>[Aim]</b> button at the upper right edge of the map.</li></ul>
Create new roof	<ul style="list-style-type: none"><li>Click on [+] button at the right of the roof name.</li></ul>
Switch roof	<ul style="list-style-type: none"><li>Click on the roof name to switch between existing roofs.</li></ul>
Configure obstacle parameters	<ul style="list-style-type: none"><li>By clicking on obstacles on the map, the parameter panel will pop up on the right side, allowing you to modify the obstacle parameters.</li></ul>

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After laying out the module arrays, proceed by clicking on the **[Next]**.

### 3.4 Design the Mounting system

On the **Design Page** you can select the mounting system.

**Procedure:**

1. Click on the tab to switch and view the specific parameters of the rail and fastener.
2. Select a product set from the list.
3. Configure the relevant parameters for the layout of the rails and fasteners, including **Rail cut length, Rail Quantity, Rail span**.

4. Select the additional components.
5. Select the color of the mounting system.
6. Click [**Calculate**] button. For a while, the verification calculation result is shown on this page.

If there is a failed message, you can follow the prompts and proceed accordingly.

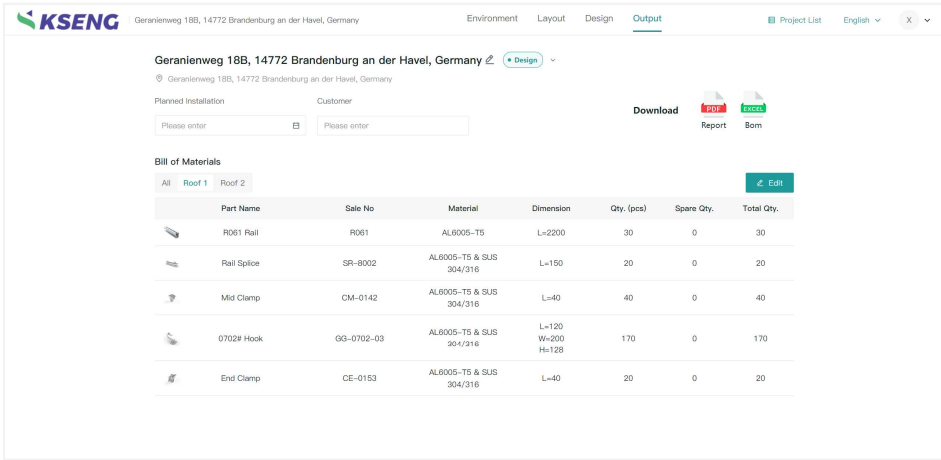
If any mounting system parameters are changed, please recalculate.

You can click on the roof name at the top of the page to switch between existing roofs.

Please ensure that all roofs have been calculated before proceeding to the next step.

### 3.5 Output

The output page displays the bill of materials for all roofs.



The screenshot shows the KSENG software interface. At the top, there is a navigation bar with 'Environment', 'Layout', 'Design', and 'Output' (selected). Below the navigation bar, the project name 'Geranienweg 18B, 14772 Brandenburg an der Havel, Germany' is displayed. There are input fields for 'Planned Installation' and 'Customer'. A 'Download' button is visible, with sub-options for 'Report' (PDF) and 'Born' (Excel). The main section is titled 'Bill of Materials' and contains a table with columns: Part Name, Sale No, Material, Dimension, Qty. (pcs), Spare Qty., and Total Qty. The table lists five items: R061 Rail, Rail Splice, Mid Clamp, 0702# Hook, and End Clamp.

Part Name	Sale No	Material	Dimension	Qty. (pcs)	Spare Qty.	Total Qty.
R061 Rail	R061	AL6005-T5	L=2200	30	0	30
Rail Splice	SR-8002	AL6005-T5 & SUS 304/316	L=150	20	0	20
Mid Clamp	CM-0142	AL6005-T5 & SUS 304/316	L=40	40	0	40
0702# Hook	GG-0702-03	AL6005-T5 & SUS 304/316	L=120 W=200 H=128	170	0	170
End Clamp	CE-0153	AL6005-T5 & SUS 304/316	L=40	20	0	20

You can name your project and add additional information like the installation date and customer name.

Click on the roof tab to view the bill of materials of the roof. Click [**Edit**] button, then you can set the Spare Qty. for each device.

Finally, you can export your project as a PDF report and Excel file by clicking the [**Download**] button.

## 4 Console

### 4.1 PV Modules

You can browse all the information on PV modules in the database.

#### Creating a new PV module:

1. Click on [**New Module**].
2. In the dialog box [**New Module**], fill in the information about the PV module and click on [**Save**].

The state of your PV module is private. You can only edit or delete modules that are marked as "private" status.

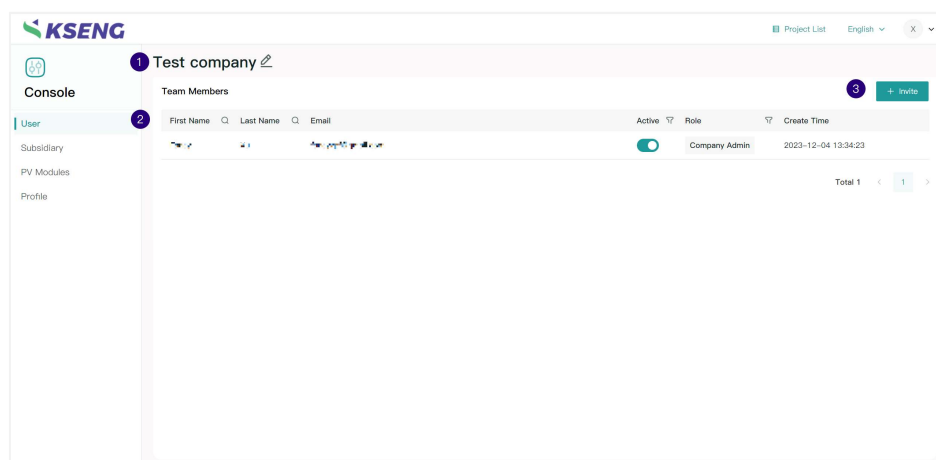
### 4.2 Profile

You can change your name and email or update your photo in the profile page. You also can reset your password in this page.

### 4.3 User

\* **Note 1:** Only company administrators can access this page.

\* **Note 2:** The first registered user of the company will automatically become the company administrator.

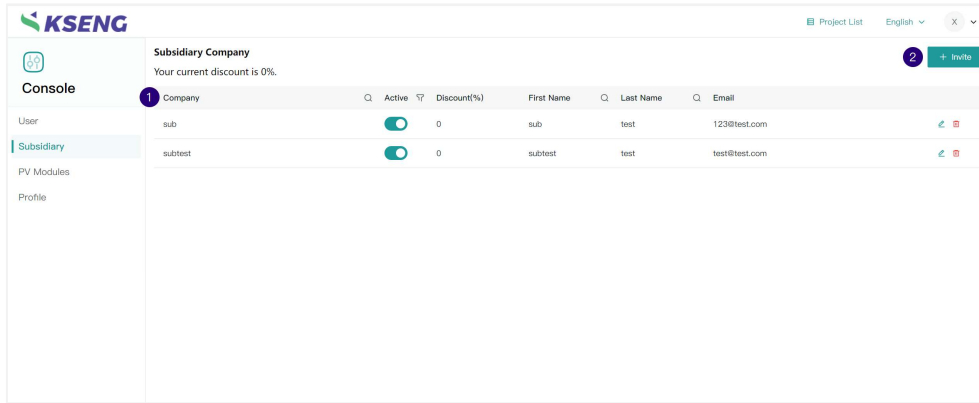


	Position	Explanation
1	Company Name	<ul style="list-style-type: none"><li>Click on the edit button next to the company name to modify the company name.</li></ul>
2	Team members	<p>The team members table displays all users in the company.</p> <ul style="list-style-type: none"><li>Click on the <b>[Active]</b> toggle to disable/activate a user.</li><li>Click on the <b>[Edit]</b> button allows you to modify the user's name.</li><li>Click on the <b>[Reset]</b> button to change the user's password.</li><li>Click on the <b>[Delete]</b> button to remove the user from the company.</li></ul>
3	Invite	<ul style="list-style-type: none"><li>Click on the <b>[Invite]</b> button to open the <b>[Invite User]</b> dialog box.</li><li>Fill in the fields and click on <b>[Save]</b>.</li></ul> <p>The new user will receive an account activation email in their inbox. They can click on the email to activate their account.</p> <p>Additionally, the company administrator can also activate the account from the user list.</p>

## 4.4 Subsidiary

\* Note 1: Only company administrators can access this page.

\* Note 2: The first registered user of the company will automatically become the company administrator.



	Position	Explanation
1	Subsidiary company	<p>The subsidiary company table displays all the subsidiaries under the company.</p> <ul style="list-style-type: none"> <li>Click on the <b>[Active]</b> toggle to disable/activate a subsidiary company.</li> <li>Click on the <b>[Edit]</b> button allows you to modify the company name and the discounts.</li> <li>Click on the <b>[Delete]</b> button to remove the subsidiary company.</li> </ul>
2	Invite	<ul style="list-style-type: none"> <li>Click on the <b>[Invite]</b> button to open the <b>[Invite Company]</b> dialog box.</li> <li>Fill in the fields and click on <b>[Save]</b>.</li> </ul> <p>The specified subsidiary company administrator will receive an account activation email in their inbox. They can click on the email to activate their account.</p> <p>Additionally, the parent company administrator can also activate the account from the user list.</p>