Application Note – Using the Site Layout Editor in the Monitoring Platform

Version History

- Version 1.0 (November 2020) – Initial release

Introduction

This application note is intended for use by users who have either Account Admin or Account Manager permissions. Other types of users do not have access to features described in this application note.

A site's physical layout provides a birds-eye view of each component in the site, making site diagnostics easier, more informative and more accurate. The site Layout Editor provides a streamlined and intuitive layout creation and mapping process, adopting SolarEdge's Designer well-proven workflow.

Figure 1: A site's layout in the layout editor (left) and in the monitoring platform (right)

Efficient PV Project Lifecycle using SolarEdge's Software Suite

The Layout Editor enhances SolarEdge's software suite seamless integration, making your work more efficient and saving you significant time throughout the full PV project lifecycle – from conception through to installation and remote maintenance.

Start by creating the site simulation in Designer, where you can plan, build and validate your SolarEdge residential and commercial systems. Continue with exporting your design as a monitoring platform site. Once the installation is completed, map the site components using the Layout Editor, where the site info and layout are already automatically included, or the Mapper app. Finally, use the monitoring platform to track the PV site performance at the module level, string level and system level.

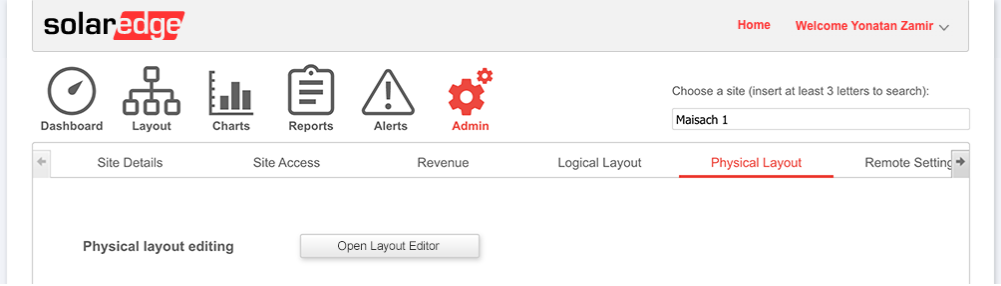
Using the Site Layout Editor

The Layout Editor can be used for new sites following the site installation when mapping is required or existing sites, when you need to edit an existing site's layout for components replacement for example.

Accessing the Layout Editor

1. Log in to the monitoring platform (https://monitoring.solaredge.com) using your user name and password.
2. Go to the site's **Admin** tab.
3. Select Physical Layout.

4. Click **Open Layout Editor**.

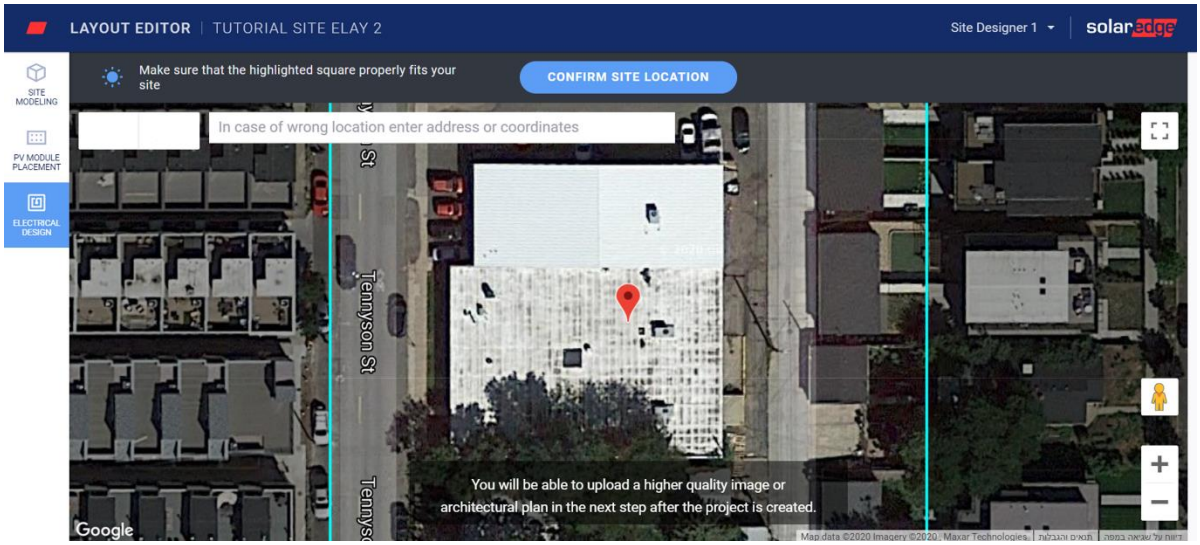


Creating a New Site Layout

Once taken to the Layout Editor tool, follow these steps to create your layout and complete site mapping.

Confirm the Site Address

1. Verify the site address and make sure the red pin indicates the exact site location on the map. All details are automatically imported from the monitoring platform.



2. If needed, drag the pin to the exact location of the site on the map.
3. Zoom in or out using the mouse scroll wheel until the entire site fits in the blue and click **Confirm Site Location**.

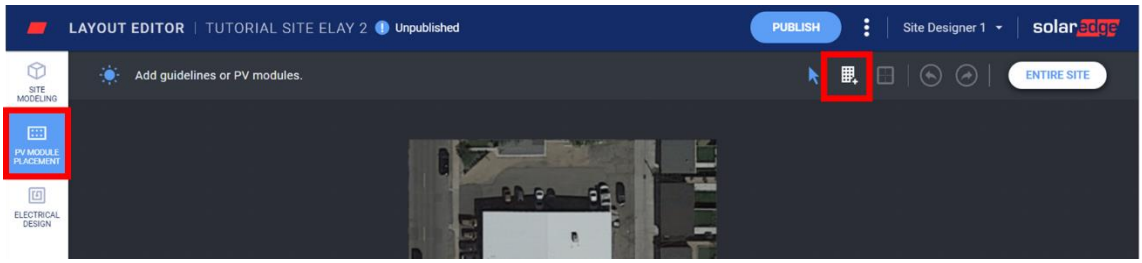
   You will be automatically taken to the PV placement tab where you can place modules according to their physical location.

NOTE

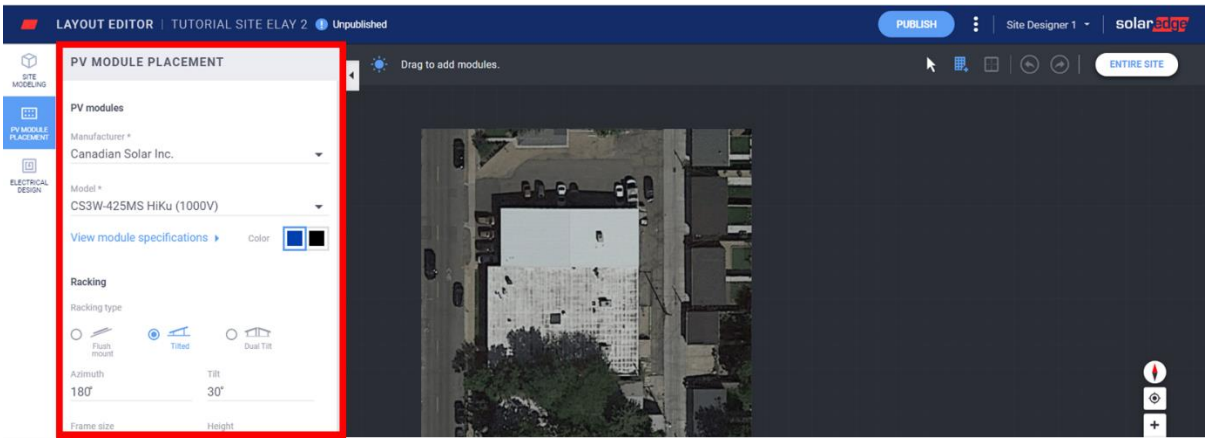
If you'd like to draw the outline of the sites and create a 3d model of it, go to the **Site Modeling Tab** before continuing. Site modeling is an optional step.

Place PV Modules

1. In the **PV Module Placement** tab, click add PV modules to place the modules on the site.



2. Verify the modules manufacturer and model information. These are imported from the monitoring platform and can be adjusted if needed.
3. Set the racking type, including tilt and azimuth.



4. Click and drag modules on top of the map to place them on your site. When you have finished placing all the modules, click Electrical Design. If the site was modelled and has multiple facets, double-click each facet to add modules to it.

Perform Electrical Design

The electrical design is divided into two steps.

Stringing (optional)

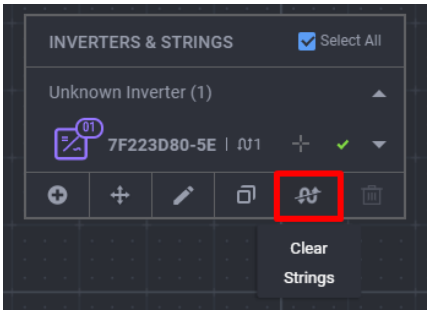
Site stringing is highly recommended since it will save you time in the mapping process and enable quick and easy faults detection in the monitoring platform.

→ **To string an inverter**

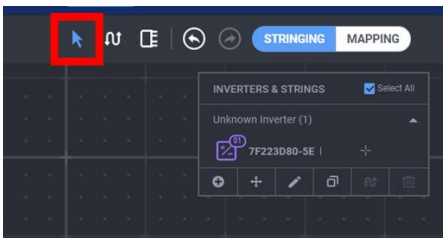
a. Select the inverter and click the **Stringing Tool**.

b. Click and drag your mouse on top of the modules in the stringing order. To finish a string, simply lift your mouse. To add a new string, repeat this step.

c. To remove strings use the **Clear Strings** tool. This will remove the existing string so you can re-string the modules if needed.

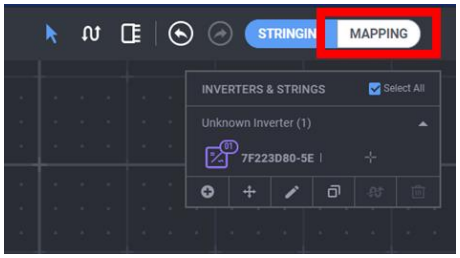


d. When done, click the **Select** tool.



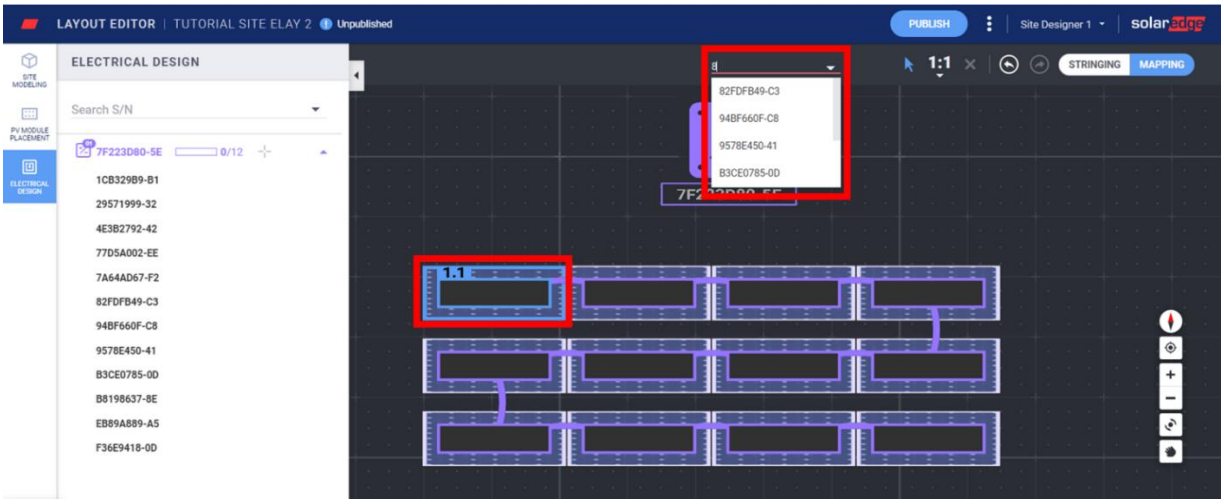
e. If required, change the inverter's location on the canvas by dragging the inverter icon.

f. Move on to Mapping by clicking the toggle on the top right side of the screen.

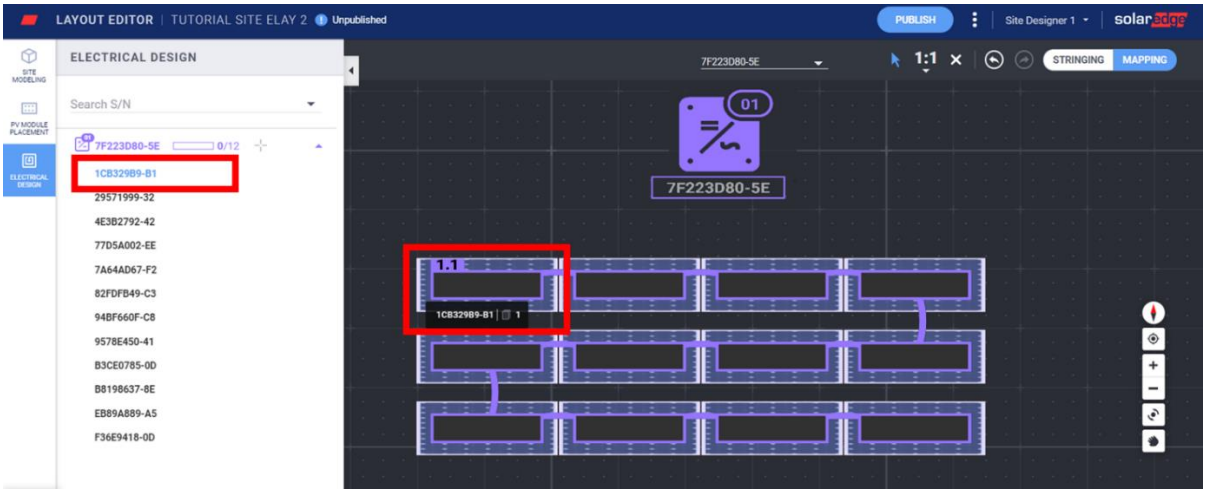


Mapping

1. To assign the power optimizers' serial numbers to their location on the site, click the first module in the string.
2. Start typing the serial number of the power optimizer connected to the module. Move up and down with your keyboard and press enter to select the relevant serial number from the list.



The next module in the string is automatically selected so you can type the next serial number.
It's also possible to assign serial numbers by selecting them from the side panel – click a serial number and then click the module it should be assigned to.



Publishing the Site Layout

1. Click **Publish** to save your changes and make sure they are visualized in the monitoring platform.
2. Review the changes.
3. If required, add notes to mention the changes made to this version so you can easily keep track of your layout versions

Creating a Site Layout for Projects Exported to the Monitoring Platform from the Designer

If you created your PV design using SolarEdge's Designer and exported it to the monitoring platform, the site info and layout are automatically included in the Layout Editor. When opening the Layout Editor, you will be taken directly to the mapping step, skipping the already existing site modelling, PV module placement, and stringing.

Refer to Mapping to learn how to assign serial numbers to the components on the canvas.

Editing Existing sites[1] using the Layout Editor

Once taken to the Layout Editor tool, follow these steps to edit your layout:

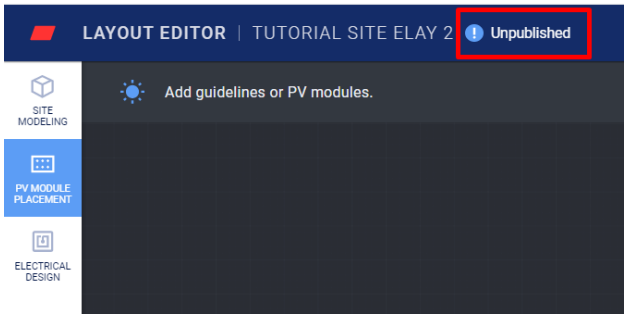
1. Verify the site address and make sure the red pin indicates the exact site location on the map. All details are automatically imported from the monitoring platform.
2. If needed, drag the pin to the exact location of the project on the map.
3. Zoom in or out using the mouse scroll wheel until the entire site fits in the blue and click **Confirm**.

   You will be automatically taken to the Mapping step in the Electrical Design tab.
   Refer to Mapping to learn how to assign serial numbers to the components on the canvas.

Site Layout Versions

Each site has two layout versions:

- **Draft version (unpublished changes)** – this is the version you see in the Layout Editor and Mapper app. Changes are automatically saved on your draft whether you're using the Mapper app in the field or the Layout Editor in the office. When using the Layout Editor, an indication to the draft status appears on the top left side of the screen.



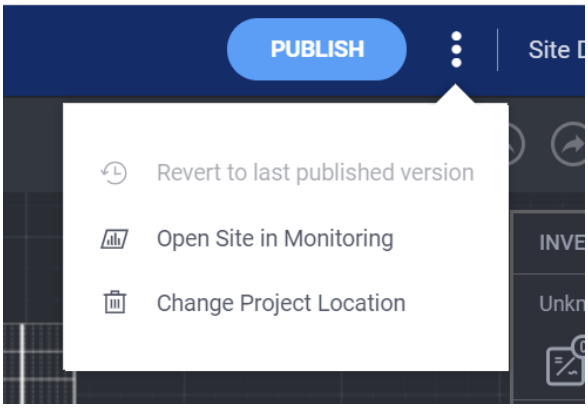
- **Published version** – this is the version that appears under the site's layout tab in the monitoring platform. All users with viewing permission to the site's layout can see the published version. When you're done making changes to the site's layout, you can publish them by using the publish button.

Managing Site Layout Versions

Click the three dots next to the **Publish** button to manage your layout versions, as seen in figure 15:

- **Revert to last published version** – delete all changes in the current draft and import the last known published version from the monitoring platform to the Layout Editor.
- **Open site in monitoring** – open a new tab showing the latest published layout in the monitoring platform.
- **Change project location** – update the site address. Note: this option will delete all power optimizers, modules and site modeling in this project. It is recommended to publish your layout before changing the site location to prevent deletion of changes made since the last published version.

[1] Existing sites are sites that have a published layout in the monitoring platform and were created using the previous version of the layout editor or using the Mapper app.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