Monitoring Portal Reports – Application Note

Revision History

Initial release- June 2015

Version 1 - March 2018:

- Replaced the generate report window
- Added the Site Commissioning report type
- Replaced reports definitions with those in the Reports GUI tooltips, except for Periodic AC Energy
- Added the 'Date Range Production Details' report type to the scheduling options table

Introduction

The SolarEdge monitoring portal provides the option to generate reports that help analyzing site performance and compare different sites and inverters. There are two main types of reports:

- Site level reports - provide information for single sites. Some reports provide breakdown into more detailed information such as inverters. The following is an example of a site energy report:

Periodic AC Energy Report for [illegible]

Report Period: From [illegible] to [illegible]

Location: [illegible]
Peak Power: 77.3 kWp
Installation Date: [illegible]
Revenue calculation: Time-of-use rate

Inverter	Serial Number	AC Energy (kWh)	Total Revenue (€)	kWh/kWp
Inverter 1	7E[illegible]	723.68	3,992.56	37.69
Inverter 2	7E[illegible]	724.50	3,995.29	37.73
Inverter 3	7E[illegible]	718.15	3,961.38	37.40
Inverter 4	7E[illegible]	684.98	3,794.00	34.60
Total for site		2851.31	15,743.23	36.89

Figure 1: Site energy report by inverter

Account level reports - provide information about the sites within an account. These reports have tabular structure where each site is represented by a single row. The following is an example of a monthly performance summary report:

Monthly Site Performance Summary

Account: My Account
Current Period: 03/01/2015 - 03/31/2015
Sites: All sites in account
Report generation time: 03/23/2015 10:07

Site Information					Open Alerts	Current Month		Previous Month		Same month last year	
Site Name	Country	City	Installation Date	Peak Power (kWp)	Highest Severity	kWh	kWh/kWp	kWh	kWh/kWp	kWh	kWh/kWp
Site 1	United States	New York	03/30/2014	9	No Data	855.9	95.1	705.6	78.4	865.8	96.2
Site 2	United States	New York	03/30/2014	11	No Data	1070.3	97.3	1051.6	95.6	1078.0	98
Site 3	United States	LA	03/20/2015	12	OK	1081.2	90.1	1198.8	99.9	1038.0	86.5
Site 4	United States	Chicago	06/19/2014	12	OK	1123.2	93.6	933.6	77.8	1132.8	94.4
Site 5	United States	Boston	12/13/2014	9	OK	730.8	81.2	847.8	94.2	738.0	82
Site 6	United States	Boston	12/13/2014	11	OK	1087.9	98.9	932.8	84.8	1181.4	107.4
Site 7	United States	New Jersey	01/13/2015	10	OK	1077.0	107.7	800.0	80	820.0	82
Site 8	United States	New Jersey	01/14/2015	10	OK	838.0	83.8	805.0	80.5	986.0	98.6
Site 9	United States	Boston	03/30/2014	4	OK	355.6	88.9	332.8	83.2	322.8	80.7
Site 10	United States	New Jersey	03/30/2014	10	OK	1003.0	100.3	850.0	85	895.0	89.5
Total				98.		9222.9	94.1	8458.0	86.3	9057.8	92.4

Figure 2: Monthly report

Generating Reports

Site Level Reports

For single sites, you can generate several reports.

1. Select the site for which to generate the report.
2. Click the **Reports** icon in the site window and do the following:

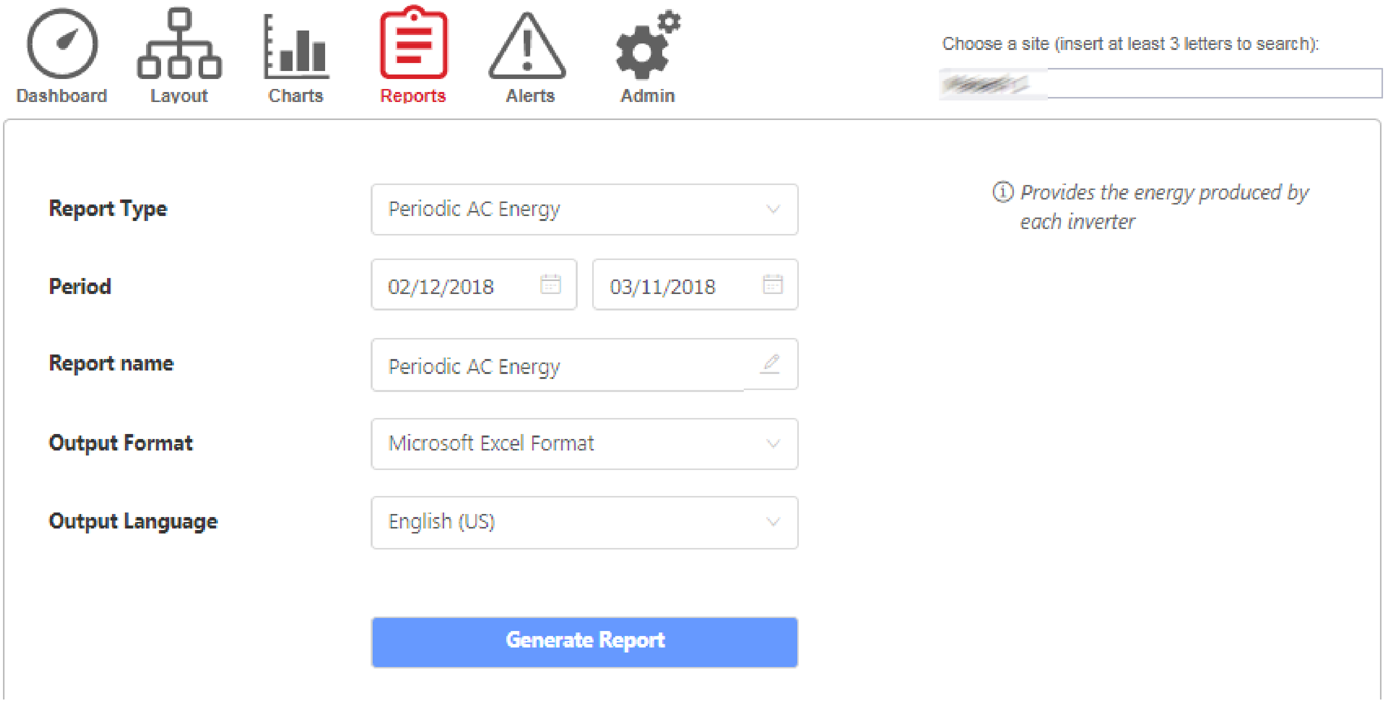
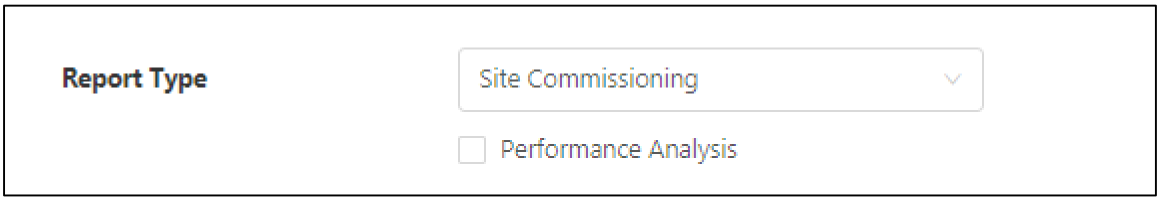


Figure 3: Generating Single site reports

a. Select the report type:

- **Periodic AC Energy** - Shows the energy produced by each inverter in the site during a selected period.
- **Site Status**- Provides production, revenue indicators and alerts' summary.
- **Site Commissioning** - Allows the installer to verify that all components are properly installed, configured and that all components are communicating properly.
  When selecting this report, the Performance Analysis check box appears. Select it to display the Performance section and to display different information in the Inverters section, including Energy Management and Power Control Settings information.



- **Modules** Mismatch Energy - Provides the necessary data for detecting modules that may be underperforming, by comparing each module's peak power and energy production to the average of all modules on the site. For more information see https://www.solaredge.com/sites/default/files/monitoring_platform_mismatch_analysis_report.pdf

b. Use the Period calendars to define the report dates
c. Enter a name for the report
d. Select the report's output format
e. Select the report's output language
f. Click **Generate Report**. The report is generated and downloaded to your browser when complete.

Account Level Reports

At the account level you can generate reports for multiple sites.

1. In the home page, select the **Reports** tab. The Generate Report tab is displayed:

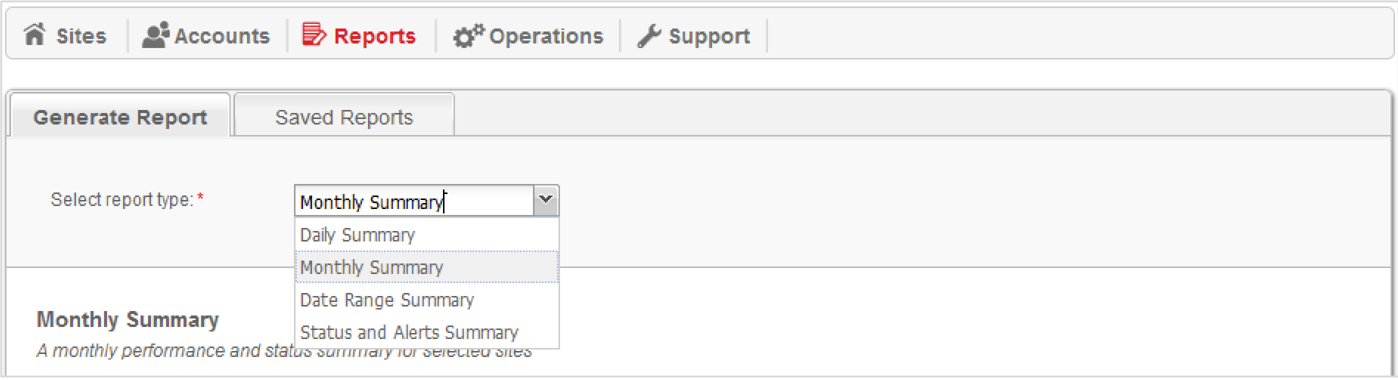


Figure 4: Generating account level reports

2. From the **Select report type** drop-down menu, select one of the following report types:

- **Daily Summary** – shows the performance of selected sites for a selected day, including comparative data of recent days.
- **Monthly Summary** – shows the performance of selected sites for a selected month, including comparative data of the previous month and of the same month a year before.
- **Date Range Summary** – shows the performance of selected sites for a selected period.
- **Status and Alerts Summary**– shows the current status and open alerts for the selected sites. This report reflects the current status; no period selection is required.

The window displays various setting options, depending on the selected report type.

3. Set the criteria for selecting the sites to be included in the report:

- **All Sites** – Select all sites under the account.
- **Specific Sites** – Type in the names of the sites to include in the report.
- **Site selection criteria** – Define selection criteria for including sites in the report. You may specify the following selection options:
- Sites in a specific sub-account
- Sites having specific text in their name
- Sites located in specific countries / states (if applicable) / cities or zip codes
- Sites of certain size (kWp)
- Sites having an alert of a specific severity or higher
- Sites installed in a specific time period
- Sites having specific text in their notes field

For example, you can use the above selection options to generate:

- A report of all sites with open alerts to help you plan maintenance activities.
- A report that compares sites in the same area by their kWh/kWp. Automatically send this report to your analytics team every week.
- A report showing the site's energy production and revenue. Automatically send this report to the site owner.

NOTE

Typing at least 3 characters enables the Search mechanism to assist you in finding the sites or account to include in the report.

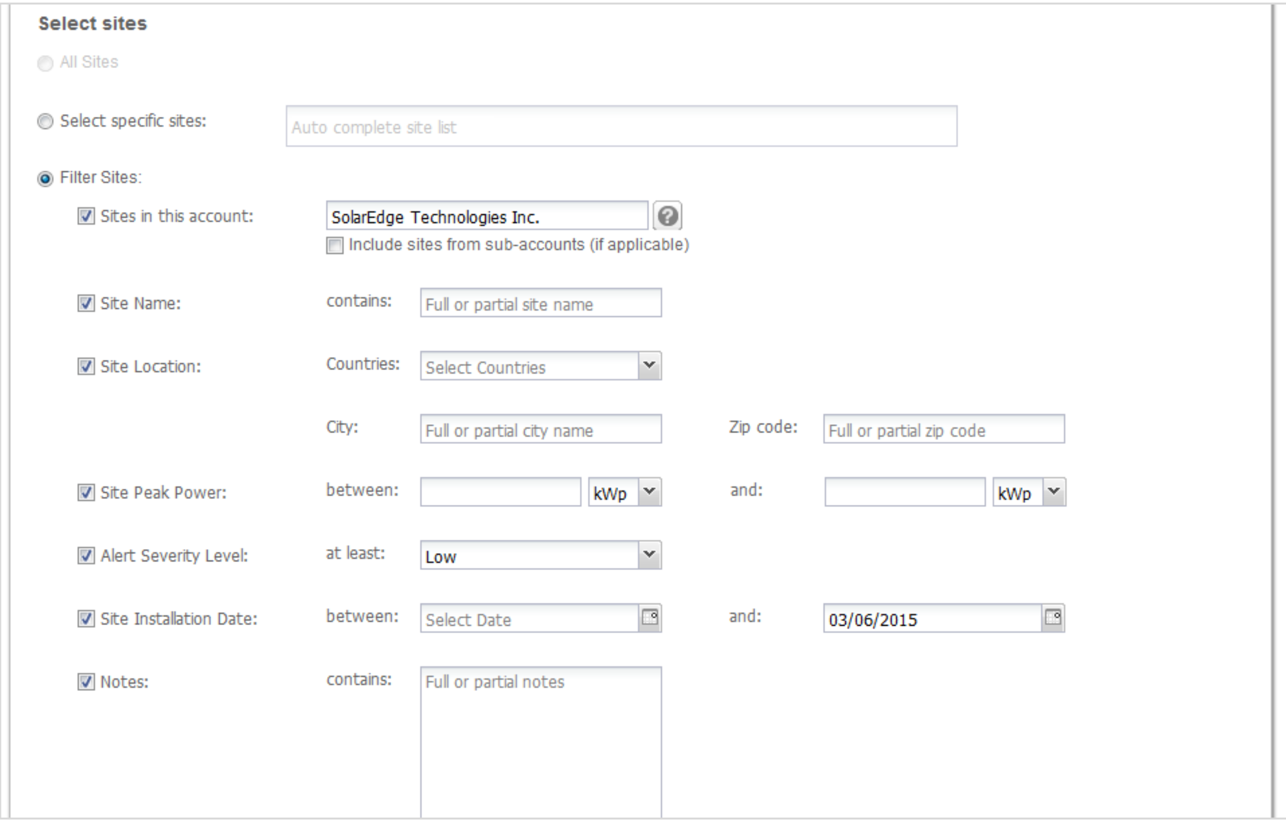


Figure 5: Setting sites selection criteria

4. Continue customizing the report by including or excluding elements, such as: site details, latest status, performance measures and reference performance data for comparison.

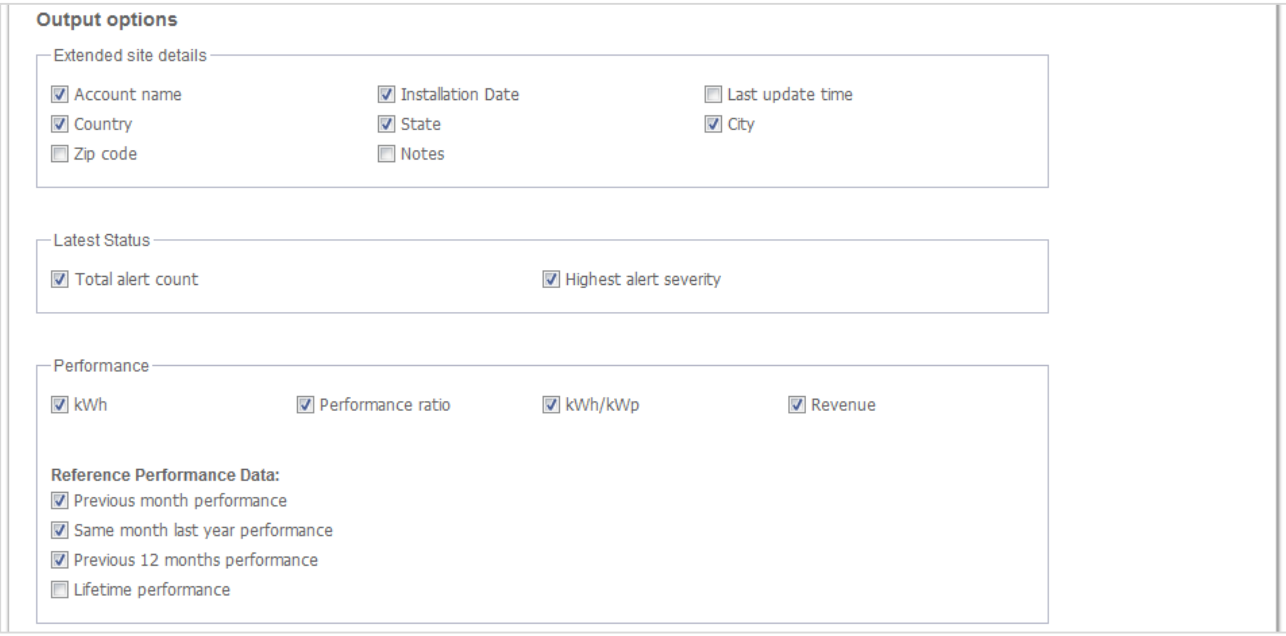


Figure 6: Report output options

NOTE

Some measures depend on the site characteristics:

- PR (Performance Ratio) is displayed only for sites that have the required sensors and PR calculation has been configured.
- kWh/kWp is displayed for sites that have the kWp configured per inverter.
- Revenue is displayed only for sites that have revenue calculation configured.

NOTE

Comparative data includes all the selected performance measures.

5. Select the report file format: Adobe PDF, HTML, Microsoft Excel or Microsoft Word.
6. Select the report language. By default, the report is generated in the language set in your profile. However, you may choose a different language, especially if you produce this report for a foreign language reader.

Figure 7: Report format options

7. Click **Generate**. You may need to provide additional information in order to generate the report, for example the date range of the report.

NOTE

You can also save the report at this stage (click **Save Report**). Refer to the next section for more information.

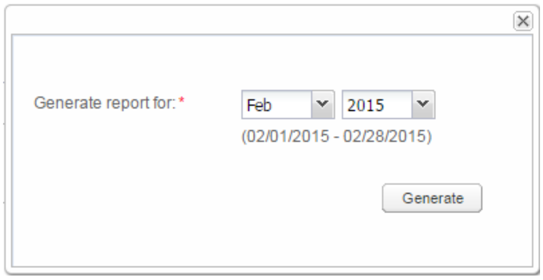


Figure 8: Example of additional report option

8. Click **Generate**. The report is generated and displayed in a new browser window (see Figure 2).

Saving an Account Level Report

Account level reports can be saved to a Saved Reports list which is shared by all account users (see Figure 10). A report can then be easily re-generated.

You can also schedule automatic generation of saved reports for distribution to a specific user list. Reports are set for generation at midnight according to the account time-zone. When scheduling the report, time-zone can be changed in case the report is expected to include sites located in other time-zones.

The following table lists the scheduling options of each report type:

Report type	Scheduling options
Daily summary	Every day
Monthly summary	Once a month. You can set the day in the month when to generate the report.
Date range summary (flexible dates)	No scheduling
Date range production details	No scheduling
Status and alerts summary	Every day. Every week. You may select the day of the week to generate the report on.

To save and configure a report:

Configure your report for auto-generation on a daily, weekly, or monthly basis, and for email distribution.

1. Upon report definition completion, click **Generate** and ensure the report output is as expected.
2. Click **Save**. The Save Report window is displayed.

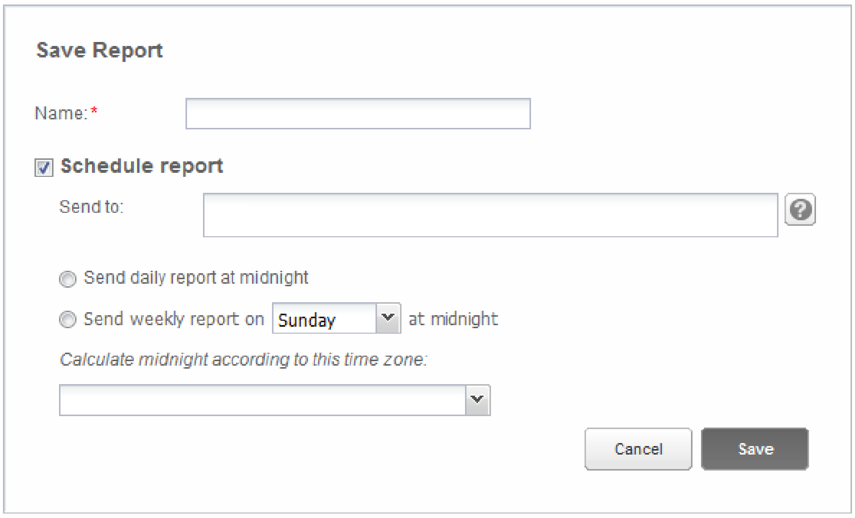


Figure 9: Save Report options

3. Enter a report name. This name is used when searching the Saved Reports list.
4. Optionally, to auto-generate the report, check the **Schedule report** option and set the additional input required:
   - Type in the email addresses of recipients to receive the report. Up to 25 mails…
   - Select the report generation schedule (daily, weekly or monthly).
   - Missing explanation on the "calculate midnight according to the time zone
5. Click **Save**.

NOTE

Reports may include sensitive data; make sure you share information with authorized users only.

Avoid sending emails to users that have not required information.

Using Saved Reports

All saved reports on your account (including sub accounts, if applicable) are listed on the Saved Reports tab. You can use the list for the following:

- Search a report by its name
- Search reports of a specific sub-account
- Edit the report - click the report name and edit its settings. For example, you can:
  - Generate the report ad-hoc
  - Disable the distribution of a scheduled report
  - Change the distribution list of a scheduled report

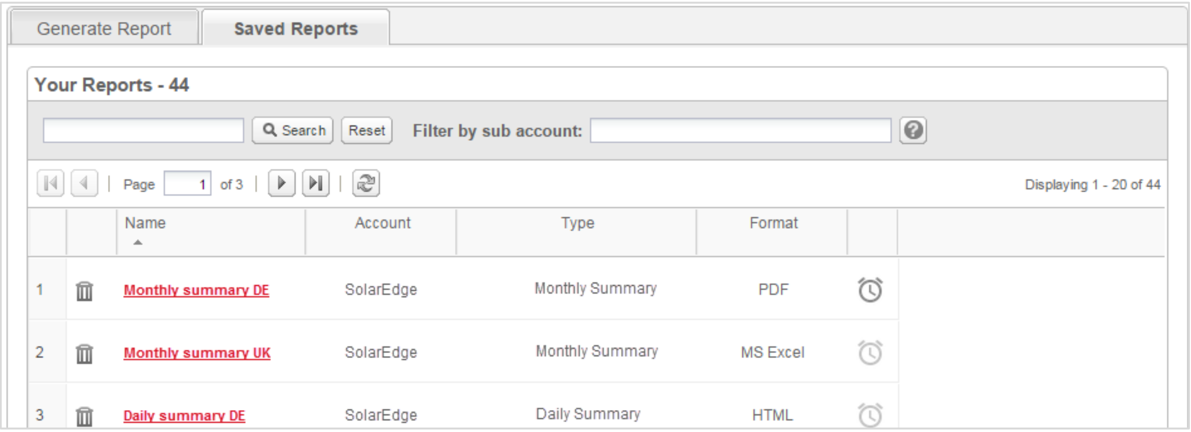


Figure 10: The Saved Reports list