



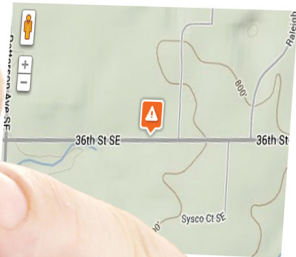
DECK

Grade Engineering

Solar Statistics Analytics Alarms Downloads

System has 2 raised alarms.

Geographic Location



At a Glance

DC Nameplate Rating
Current AC KW / DC Size
Generation Today
Generation this Month
Generation this Year
Generation Lifetime
Predicted Power
Last Power Measurement

SMA Inverter (WR7... SMA Inverter (WR8... SMA Weather (S

to create a virtual device or baseline.

[ADMIN PANEL] USER GUIDE

Section 2

v13.11.01

DECK
Monitoring

Section 2

Contents

Getting Started: Survey Individual Locations with System Views

System Overview	17
System Navigation	21
System Solar Statistics	22

Other Sections

Section 1

Getting Started: Global Views for Fleet Management

Section 3

DECK Analytics: Build Graphs for Data Visualization

Section 4

DECK Alarms: Set up Automated System Oversight

Section 5

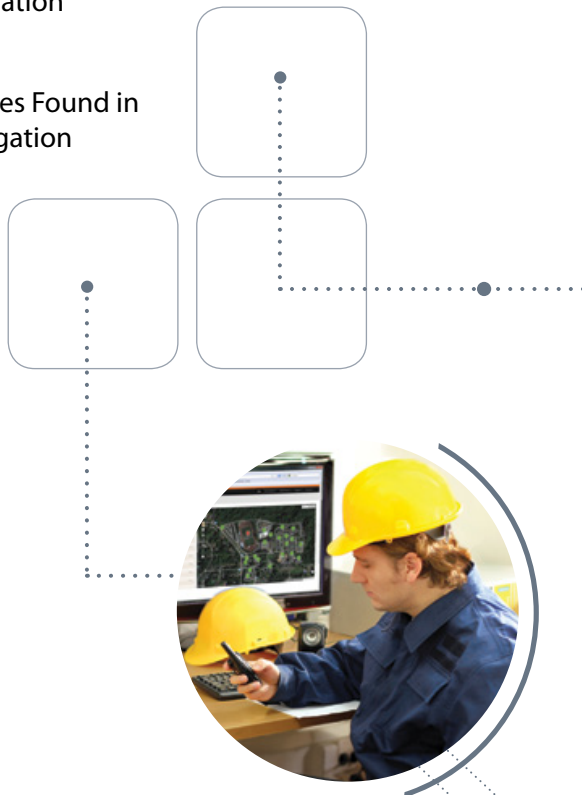
DECK Reports: How to Download System Data

Section 6

Other Features Found in Global Navigation

Section 7

Other Features Found in System Navigation



Getting Started: Survey Individual Locations with System Views

DECK

System Overview

Clicking on a specific job name in your **Systems Overview** page view navigates you to that site's **System Details** page view. Here you can review the latest data from each individual site. This page also shows a device map of every reporting device in the system, along with DC Nameplate Rating and other vital statistics for the project. Other noteworthy features on the System Overview page view include **System Tags**, **System Notes**, and the **Virtual Device** upload link.

DECK | Map | Solar Statistics | Global Views | Support | Account

Gellen Center

Overview | Solar Statistics | Analytics | String Analytics | Alarms | Downloads | Notes | Logistics | Extensions | Settings

Geographic Location

Dashboard Link: [gellen_center](#)

At a Glance

DC Nameplate Rating	1,115.0 kW
Current AC kW / DC Size	59%
Generation today	418.87 kWh
Generation this month	166,593.47 kWh
Generation this year	420,457.09 kWh
Generation lifetime	1,117,882.01 kWh
Predicted Power	516.69 kW
Last Power Measurement	654.18 kW

Tags on this system: Postal Code 95017, Veris H8036, Weather Station

Add additional tags to this system

Type here to create tags or reuse existing tags

System Notes

Use this space to add site specific information such as installed equipment, special instructions, onsite contact numbers, etc.

Device Reporting Hierarchy | Upload data to create a virtual device or baseline.

Device	Latest Data	Last Reported
FRT-Mercer Mail	134.98 kW power -	Aug 22, 2013 at 18:15:00
Amtec Weather Station	114.90 W/m2 irradiance -	Aug 22, 2013 at 18:18:05
Meters	134.98 kW power -	Aug 22, 2013 at 18:15:00
Meter 1 BBBY - 427.44kw	12.96 kW power -	Aug 22, 2013 at 18:18:00
Meter 2 TJX - 411.84kw	18.72 kW power -	Aug 22, 2013 at 18:18:01
Meter 3 CAM - 65.52kw	38.56 kW power -	Aug 22, 2013 at 18:18:01
Meter 4 CAM (Main BLDG) - 201.6	36.64 kW power -	Aug 22, 2013 at 18:18:02
Inverters		

- Geographic Location:** See your project location and current alarm status icon in an interactive map.
- At a Glance:** Basic vital statistics for the system, including DC Nameplate Rating, current generation data, and historical generation data.
- Dashboard Link:** This quick link opens the public-facing Dashboard for this system.
- System Tags:** This feature automatically assigns tags to your system based on reporting hardware devices. You can also add your own custom tags for metrics such as location, system size, etc. Tags can then be used to sort and group systems in your Global Statistics Tables (see Section 1, page 8).
- Virtual Device Upload Link:** This feature allows you to upload raw data sets as .csv files for visualization alongside reporting data in DECK Analytics (see page 20).
- Device Reporting Hierarchy:** See a complete list of all reporting devices arranged in sequence. This list includes the most recently reported data from each device along with a time stamp value.
- System Notes:** Create and edit notes to share with other registered Admin Panel users.

Special Features

DECK

MapSolar StatisticsGlobal ViewsSupportAccount

Gellen Center

OverviewSolar StatisticsAnalyticsString AnalyticsAlarmsDownloadsNotesLogisticsExtensionsSettings

Geographic Location

At a Glance

DC Nameplate Rating	1,115.0 kW
Current AC kW / DC Size	59%
Generation today	418.87 kWh ⓘ
Generation this month	166,593.47 kWh ⓘ
Generation this year	420,457.09 kWh ⓘ
Generation lifetime	1,117,882.01 kWh ⓘ
Predicted Power ⓘ	516.69 kW
Last Power Measurement	654.18 kW

System Notes

Use this space to add site specific information such as installed equipment, special instructions, onsite contact numbers, etc...

Dashboard Link:

[gellen_center](#)

Tags on this system ⓘ

Postal Code 95917 ⓘ Vers ⓘ

Add additional tags to this system ⓘ

Type here to create tags or reuse existing tags ⓘ

Device Reporting Hierarchy

Upload data to create a virtual device or hierarchy

Device

- FRT-Mercer Mail
 - Amtec Weather Station
 - Meters
 - Meter 1 BBBY - 427.44kW
 - Meter 2 TJX - 411.84kW
 - Meter 3 CAM - 65.52kW
 - Meter 4 CAM (Main BLDG) - 201.6
 - Inverters
 - Inverter 1 BBBY - 305.76kW
 - Inverter 2 TJX - 112.32kW
 - Inverter 3 CAM - 65.52kW
 - Inverter 4 CAM (Carport) - 109.2 kW
 - Inverter 5 BBBY - 305.76kW
 - Flex I/Os
 - Flex I/O 1 - DC Current Petco
 - Grouping Node
 - cb5 - 137.9 amps
 - cb6 - 137.9 amps
 - cb7 - 137.9 amps
 - cb8 - 129.8 amps
 - Flex I/O 2 - DC Current Rcb 2 TJX 50kW
 - Grouping Node
 - Cb15 - 113.5 amps
 - CB16 - 105.4 amps
 - CB19 - 129.8 amps

Some data points may appear with a small "information" icon. Mousing over that icon will call up additional useful information.

kWh ⓘ

System Notes

Use this space to add site specific information such as installed equipment, special instructions, onsite contact numbers, etc...

Devices that are reporting more than one data point will appear with a small arrow icon next to the data point. Clicking on the arrow will open a drop-down menu showing all available device data points.

Mountain House 2

1.83 kW power -	Sep 23, 2013 at 07:24:38
1.47 kW power -	Sep 23, 2013 at 07:24:28
2.00 kW power -	Sep 23, 2013 at 07:24:30
5.19 A AC Current A	Sep 23, 2013 at 07:31:35
5.29 A AC Current B	Sep 23, 2013 at 07:24:31
5.00 A AC Current C	Sep 23, 2013 at 07:24:31
119.30 V AC Voltage (A-N)	Sep 23, 2013 at 07:24:31
0.43 amps current	Sep 23, 2013 at 07:24:31
0.18 amps current	Sep 23, 2013 at 07:24:31
-0.04 amps current	Sep 23, 2013 at 07:24:31
0.49 amps current	Sep 23, 2013 at 07:24:31

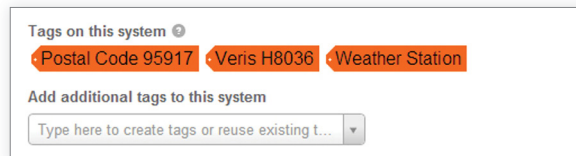
power ⓘ

System Tags

The System Tag feature was created to provide additional fleet management tools for customers with larger project portfolios. System Tags can help you search, sort and group locations in your **Statistic Tables** page views, found under **Solar Statistics** in **Global Navigation**.

The System Tags interface can be found directly under the “At A Glance” statistics table on the System Overview page for each location. Here you can view any existing tags (including automatic tags generated by DECK), as well as to create or remove your own custom tags.

To create your own custom tags, begin typing in the drop-down menu. This will prompt a drop-down list of tags you’ve previously added to other locations; choose from this list, or just hit Enter to add your text as a new tag.



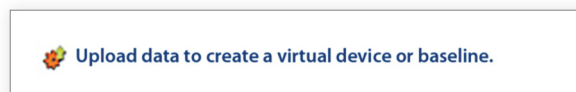
For a full explanation of how System Tags can be used to filter locations in your Global Statistic Tables, see Section 1, page 8.

Virtual Device Data Upload

The feature allows users to upload external data sets into the Admin Panel that can be visualized alongside reporting data in **Analytics** page views.

Virtual Device data can be used for many purposes:

- input data for theoretical baselines or performance guarantees which the user can compare to actual reported data
- upload historical data into the application
- manipulate exported system data with a formula or a proprietary model (such as an Excel macro), then upload as Virtual Device to compare against current reporting data
- visualize user-entered data from devices that are not connected to the DECK Monitoring system



For more information about possible applications for the Virtual Device feature, see Section 3, page 30.

Virtual Device Upload Interface

Clicking on the Virtual Device data upload link prompts the upload interface seen below:

Virtual Device Name

Choose a name for your new Virtual Device.

Name of Virtual Device

Upload Data

Upload a .csv data file for use as a Virtual Device.

Select Data File

Click here for instructions on how to format your data file.

Data Repetition

Choose whether and how this data set repeats.

Repeat this data: Daily

Data Type

If your data type isn't listed, please select "N" for a generic numeric data type.

value (#)

Reported As

Choose how this data is reported. Does each point represent a difference (delta or offset) from the previous measurement, is it a running total with each entry larger than the last, or does it consist of average values?

☒ Difference ☐ Running Total ☐ Average

Data Point Relation to Time Period

Choose whether data points precede or follow their associated time periods.

☒ Point follows period ☐ Point precedes period

Cancel Create Device

Fill out all fields here, upload your .csv data file under "Upload Data," then click "Create Device" to generate your data set in the application.

A few notes about creating Virtual Device data sets:

- Virtual Device data sets must contain 2 columns of data: value (data type of your choice) paired with a valid time stamp (time value). If you wish to see your Virtual Device data plotted alongside reported data, you must make sure that the time stamp values between the two data sets correspond. You will not be able to overlay data sets with different dates.
- It is not possible to edit virtual device data in the application. If you need to correct a data set, you must delete that virtual device in the application, then re-upload the corrected data as a new virtual device.
- The interface in **Global Analytics** and in **System Advanced Analytics** allows you to select virtual device data sets by name. Give your virtual device a descriptive name that will be easy to recognize.
- The fields here for "Data Type" and "Reported As" play an important role to determine how your data sets will be visualized. Note that only like data types can be plotted using the same value range on a single y-axis.
- Note that your .csv files must follow strict formatting rules to be accepted as Virtual Device data. Please refer to the formatting guidelines found at "Click here for instructions on how to format your data file."

How to format your data file

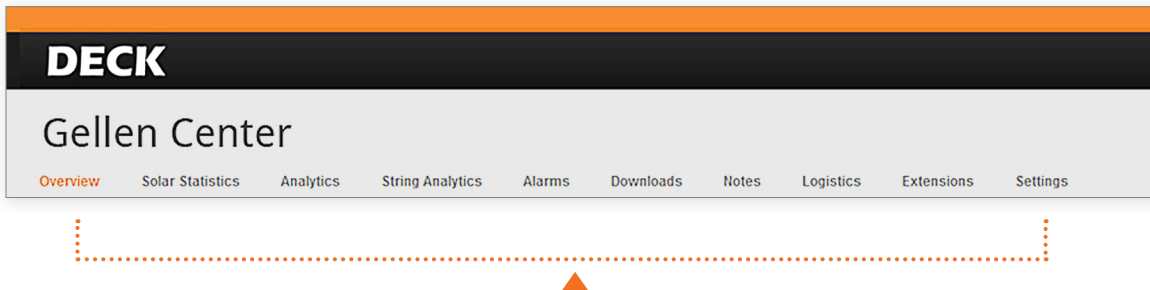
Your CSV file must contain exactly two columns, and begin with a header row. The first column must contain times in one of the formats described below, and the second column must contain numeric values.

The header entry for your time column must have one of the following three values, to specify the interpretation of your time data:

System Navigation

System Navigation tabs do not appear on your Admin Panel page views when you have navigated to “global” (portfolio-wide) page views. That includes your *Systems View: Map* page view, your *global Solar Statistics* page views, *Support* page views, *User Management* page views, etc.

When you navigate to a system-specific page view, however, your System Navigation tabs will appear on the left side of the gray stripe at the top of the page (see image below).



System Navigation tabs provide access to system-specific data and software features. System Navigation allows you to find:

- System-specific **Solar Statistics**
- System-specific **Analytics** (graphing tool)
- System-specific **String Analytics** (only activated on systems with string-level monitoring package)
- System-specific **Alarms** (create and edit alarms for this system)
- System-specific **Downloads** (download raw data sets)
- System-specific **Notes** (create, edit, and sort your own system notes)
- System-specific **Logistics** (track active hardware shipments for this system)
- System-specific **Extensions** (activate available added features for this system)
- System-specific **Settings** (user management controls for this system)

(You may also access *Analytics*, *Alarms*, and *Notes* for your entire portfolio in global page views... see **Global Navigation, Section 1**, page 4.)



System Solar Statistics

The **Solar Statistics** page view for each individual system shows a range of helpful system diagnostics in a single page view that is ideal for phones, tablets, and other mobile devices.

Available metrics for the System Solar Statistics page view include:

- System at a Glance statistics
- Average Generation per kW Installed
- Seasonal Effect on Solar Production
- Past 12 Months Generation Total
- Annual Generation Equivalencies
- 3 Day Production Performance Overlay
- 3 Month Production Performance Overlay
- Peak Performance Historical Graph
- Monthly Peak kW to DC Nameplate Rating

