

Easy Access to Rich Performance Data with the HiQ Solar Communications Gateway



Our Gateway is capable of connecting to over a hundred local HiQ inverters and forms the center for data access. When connected it easily auto-discovers inverters around it and is ready to provide visibility into real-time performance.

For devices such as laptops and tablets with access to the local network, inputting a simple web address provides an easy connection. Devices outside the local network can access the Gateway securely through port-forwarding.

In addition to real-time data, the Gateway stores data on a local SD card once-per-minute (user-settable), and uploads that same data to our servers where a complete history of data is accessible to you.

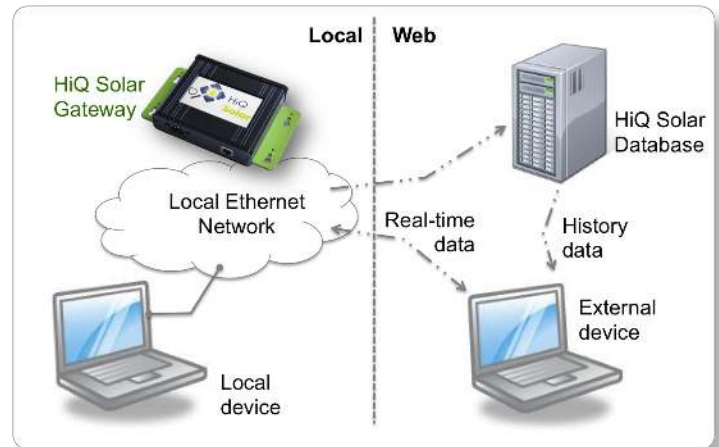
Data available includes the following instantaneous information:

- AC power produced for the system, and each inverter (Watts, kW hours)
- AC power delivered into each phase
- AC grid voltages (V_{pp} , V_{RMS}), grid frequency (Hz)
- DC power produced in Watts per-string or per-module depending upon the inverter models present
- DC string or module voltages
- Inverter internal temperatures
- Status and alarms

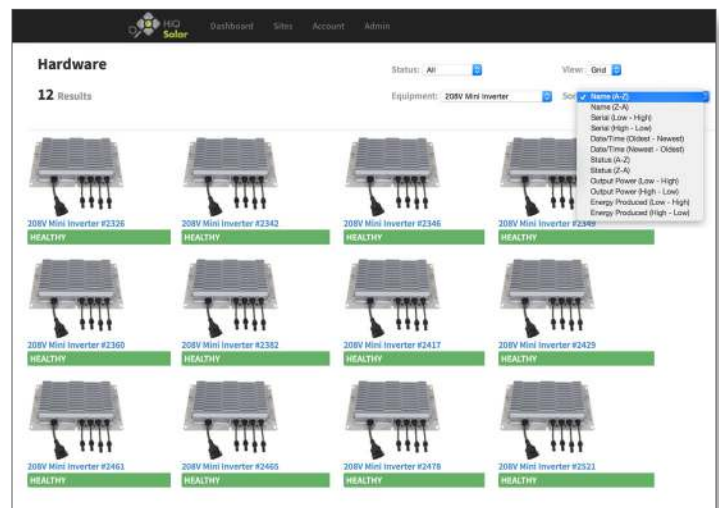
Data is available in graphical form from the analytics portal:

- Kiosk view showing multiple views including array output
- String and inverter output power (Watts)
- Array output (kWh)
- Hardware status and alarms
- ...and considerably more

Data produced by your system is owned by you, and there are no recurring service fees.



Flexible data access from inside and outside customer networks

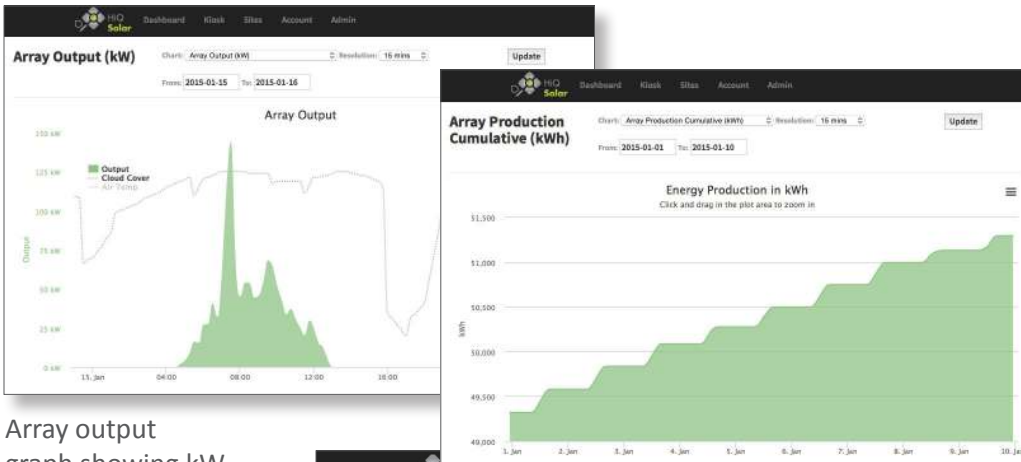


| Name: | Serial: | Date/Time: | Status: | Output Power: | Energy Produced: |
|------------------------------|---------|---------------------|---------|---------------|------------------|
| 208V Mini Inverter #2382 | 2382 | 2015-01-16 14:10:00 | HEALTHY | 977.2 W | 1.32 MWh |
| 208V Mini Inverter #2360 | 2360 | 2015-01-16 14:08:00 | HEALTHY | 906.05 W | 1.5 MWh |
| 208V Mini Inverter #2346 | 2346 | 2015-01-16 14:06:00 | HEALTHY | 890.46 W | 1.53 MWh |
| 208V Mini Inverter #2405 | 2405 | 2015-01-16 14:06:00 | HEALTHY | 867.57 W | 1.59 MWh |
| 208V Mini Inverter #2349 | 2349 | 2015-01-16 14:06:00 | HEALTHY | 864.23 W | 1.44 MWh |
| 208V Mini Inverter #2429 | 2429 | 2015-01-16 14:06:00 | HEALTHY | 837.58 W | 1.4 MWh |
| 208V Mini Inverter #2478 | 2478 | 2015-01-16 14:06:00 | HEALTHY | 834.99 W | 1.42 MWh |
| 208V Mini Inverter #2461 | 2461 | 2015-01-16 14:06:00 | HEALTHY | 831.36 W | 1.37 MWh |
| 208V Mini Inverter #2521 | 2521 | 2015-01-16 14:06:00 | HEALTHY | 830.88 W | 1.35 MWh |
| 208V Mini Inverter #2342 | 2342 | 2015-01-16 14:06:00 | HEALTHY | 823.68 W | 1.22 MWh |
| 208V Mini Inverter #2417 | 2417 | 2015-01-16 14:06:00 | HEALTHY | 802.57 W | 1.07 MWh |
| 208V Mini Inverter #2326 | 2326 | 2015-01-16 13:58:00 | HEALTHY | 757.53 W | 1.16 MWh |
| Communications Gateway #1102 | 1102 | 2015-01-15 17:30:00 | HEALTHY | 0 W | 16.3 MWh |

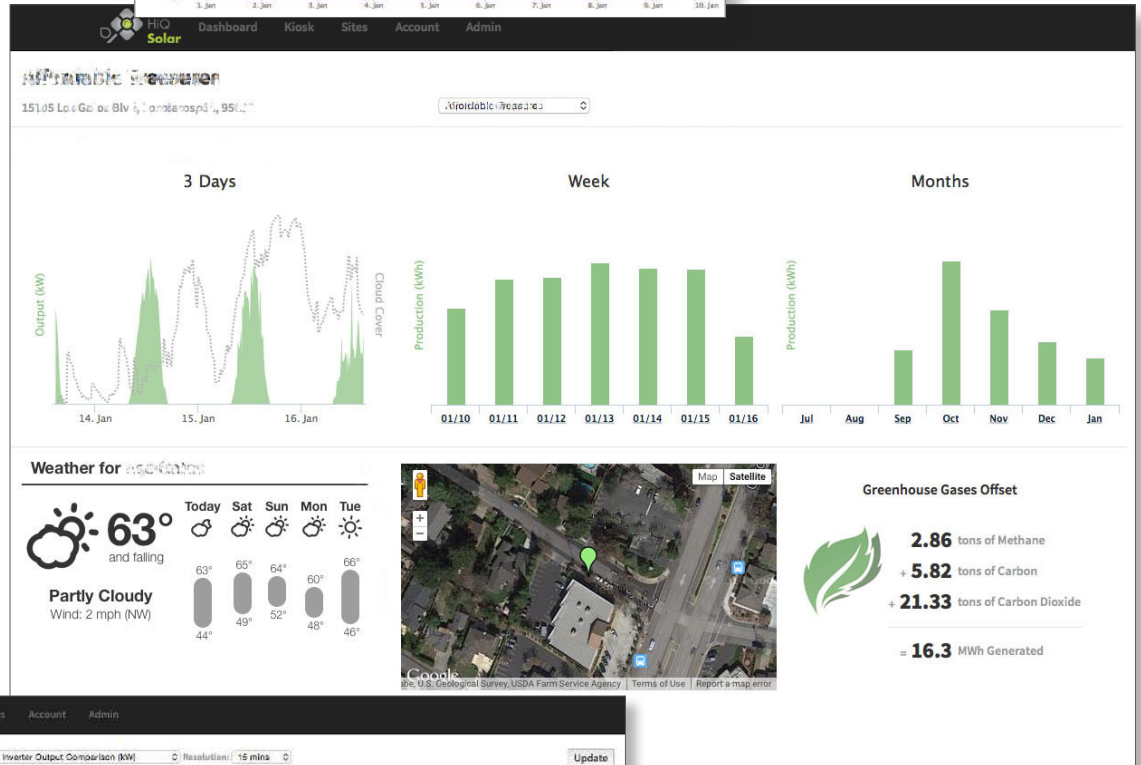
Alternative system hardware views available from the analytics portal



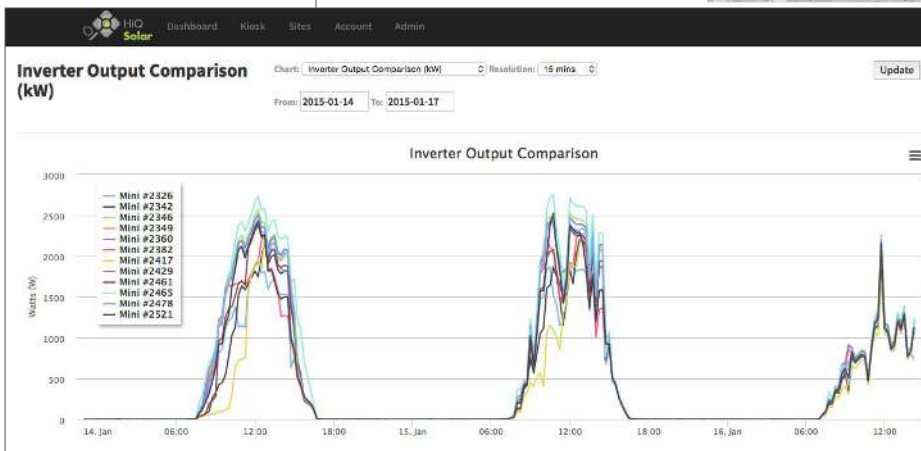
Cumulative array output graph



Array output graph showing kW produced



Kiosk view showing key array performance metrics suitable for public display



Two views comparing inverter outputs for a customer array. It is easy to identify under performing strings in order to get them fixed quickly

Chart: Inverter Production Comparison Resolution: 15 mins
From: 2015-01-01 To: 2015-01-07

Inverter Production Comparison

