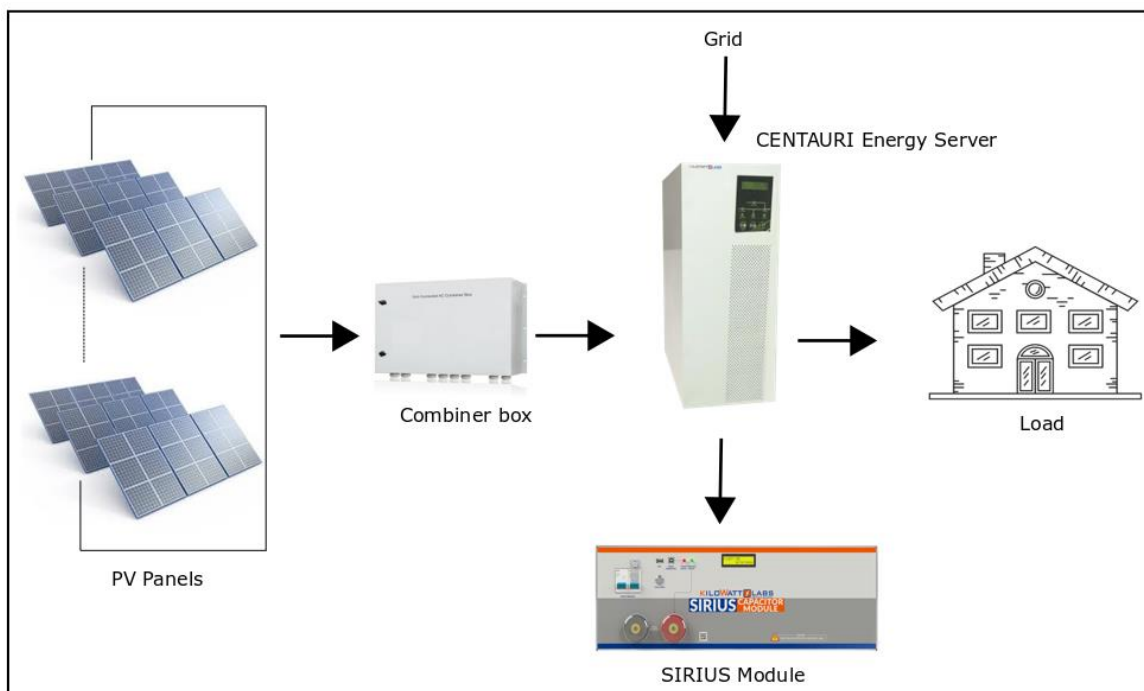# Micro Grid View

User Manual

Version 1.0; Release Date: November 2019
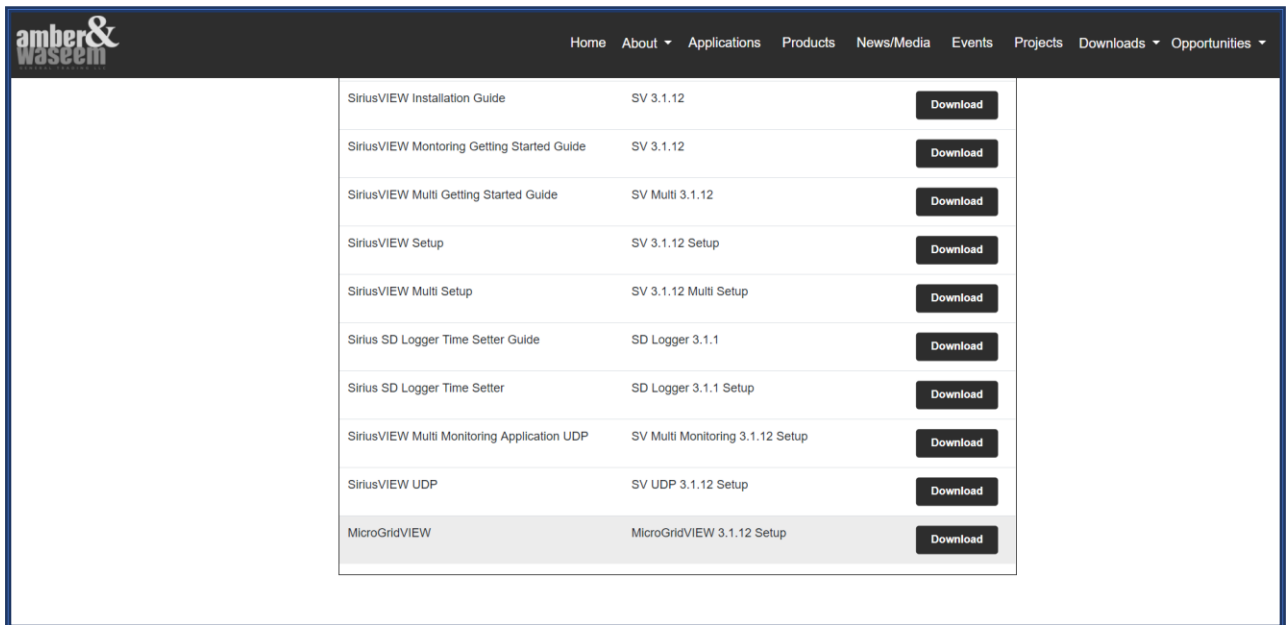

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1.   How to Install Microgird VIEW:

Follow the steps below to install Microgrid VIEW:

→   Go to Amber & Waseem website "https://www.amberandwaseem.com/".

→   Go to Downloads and click on Manuals and Software's.

→   You will see Download Applications and Manuals. Go to Microgrid VIEW Setup and click on Download as illustrated below.
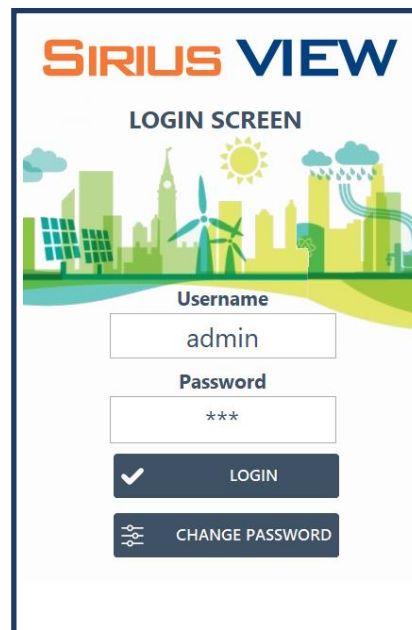

→   Double click on Microgrid VIEW Monitoring Application to execute it. A Log-in screen will appear as illustrated below.
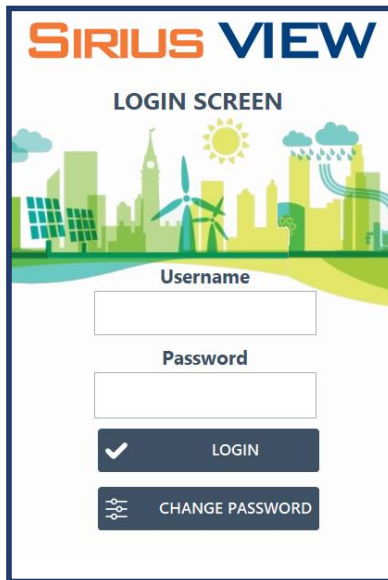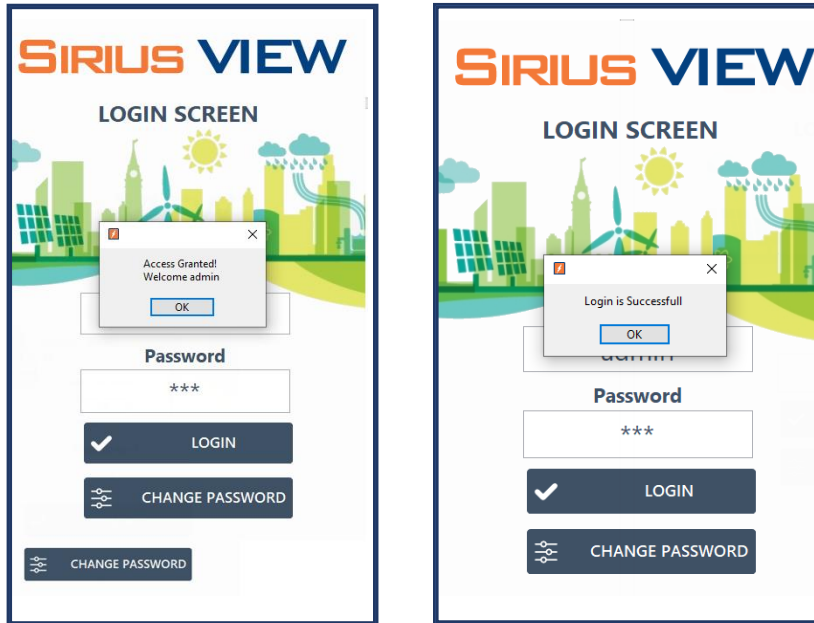
→ Enter the default Username and Password in the login screen.

Default Username: admin

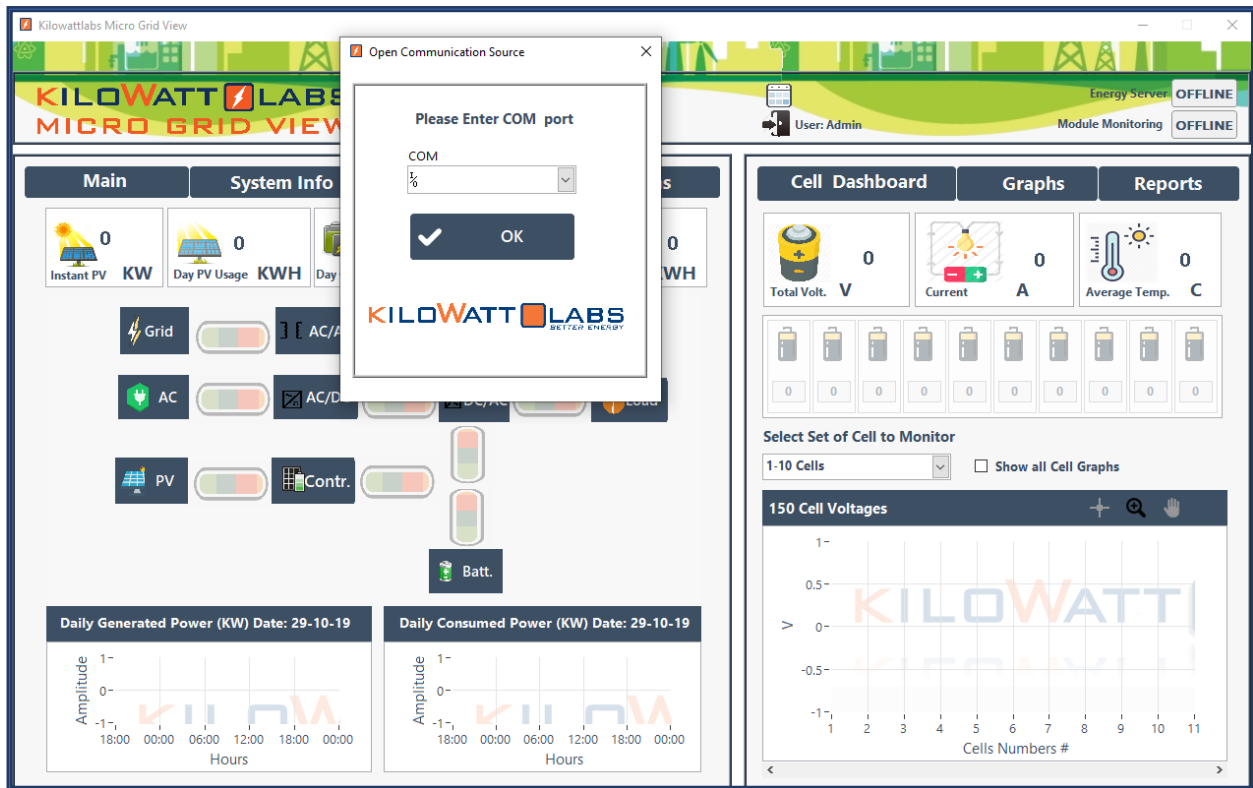Default Password: 123

→ By clicking on Login, the below pop-up message will appear.

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→ In the drop-down menu, select the COM port and click OK.

2. Microgrid View Description:

2.1 Application Banner:

Application banner shows Time and date, user, Energy Server and Module Monitoring as shown below.

Energy Server and Module Monitoring are the main indicators.

Indicator	Status	Troubleshooting
Energy Server	Online: Energy Server is communicating with Microgrid View.	-
	Offline: Energy Server is not communicating with Microgrid View.	Check whether RS232 cable is properly connected.

Module Monitoring	Online: Sirius Module is communicating with Microgrid View.	-
	Offline: Sirius Module is not communicating with Microgrid View.	Check whether Ethernet cable is properly connected.

2.2 Energy Server Monitoring:

2.2.1 Main Page:

The Main Page is shown below:
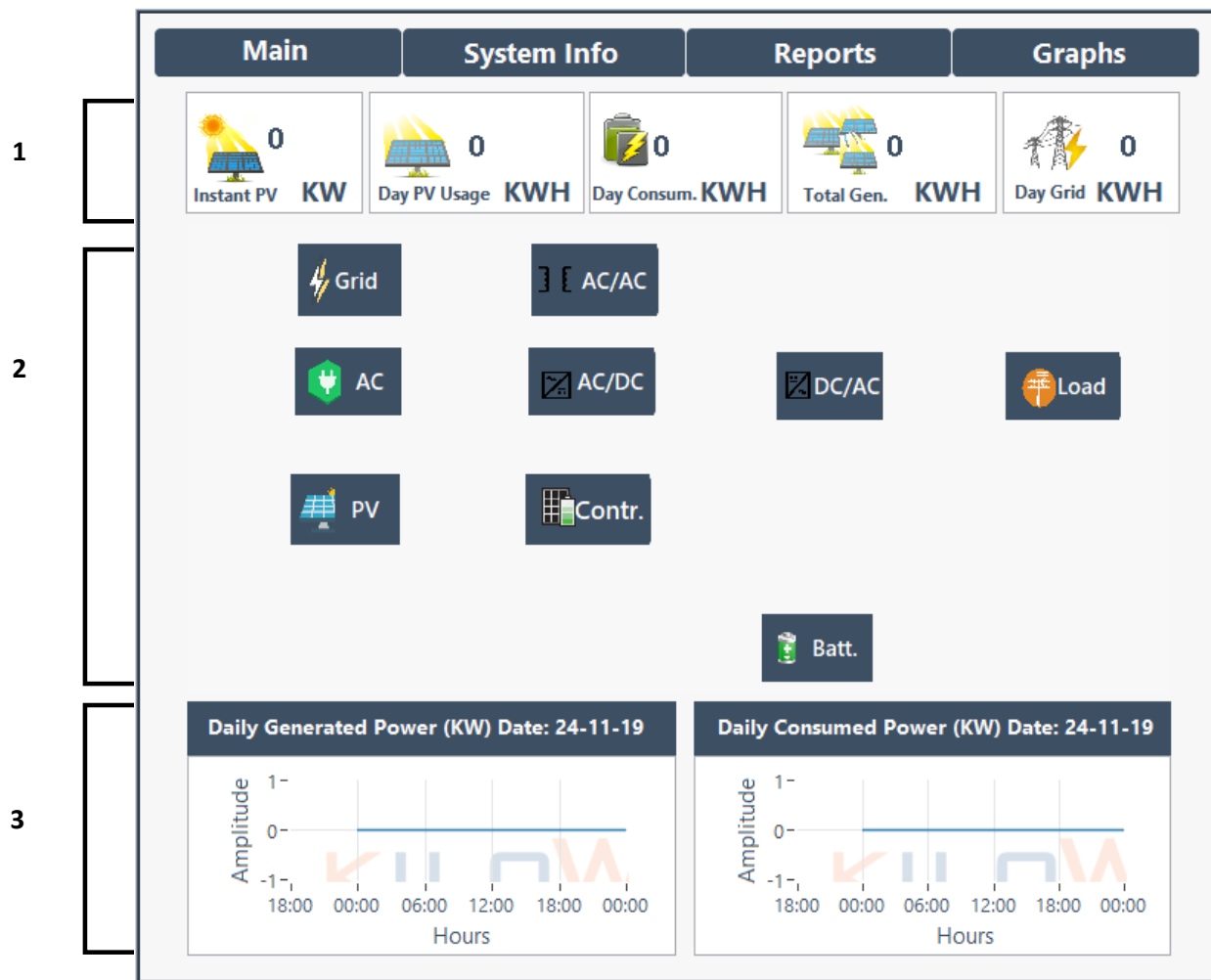
1	Dashboard	Instant PV	Instant PV shows the power generated by PV panels in KW. Higher the intensity of Sun, higher will be the generated power.

		Day PV Usage	This shows daily Energy Generated in KWH.
		Day Consum.	This shows daily consumed Energy in KWH.
		Total Gen.	This shows the total Energy generated from the beginning in KWH.
		Day Grid	Day Grid shows the daily Energy from the Grid in KWH.
2	System Architecture of Energy Server	Please refer to section 6 in Energy Server Manual for the working principle of the Energy Server.	
3	Graphs	Daily Generated Power (KW)	This graph shows the daily generated power with respect to time in hours.
		Daily Consumred Power (KW)	This graph shows the daily consumed power with respect to time in hours.

2.2.2 System Information:

This page gives AC, PV, Battery, Bypass, Output, Alarm and other information's. The system information page is shown below. We will explain one by one in detail.
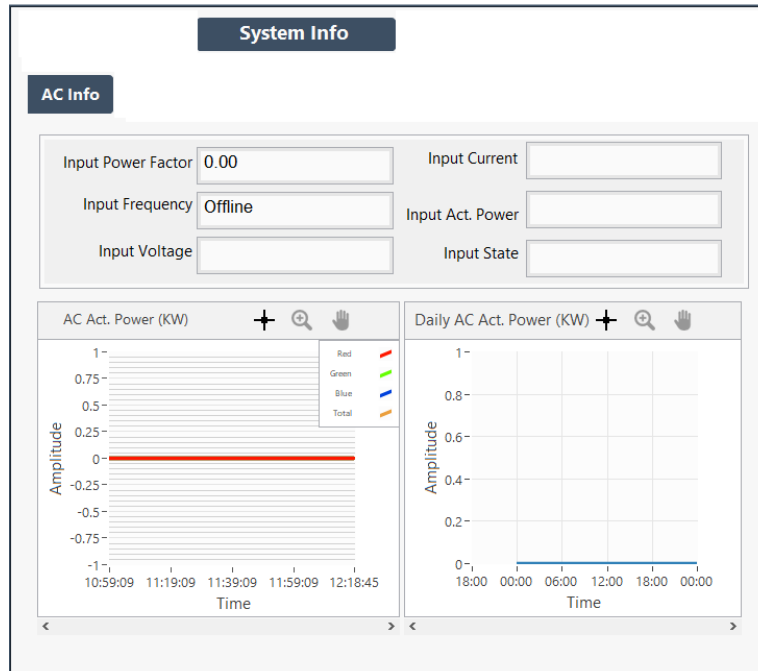

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2.2.2.1 AC Information:

This page gives information about Input Power Factor, Input Frequency, Input Voltage, Input Current, Input Active Power and Input State.
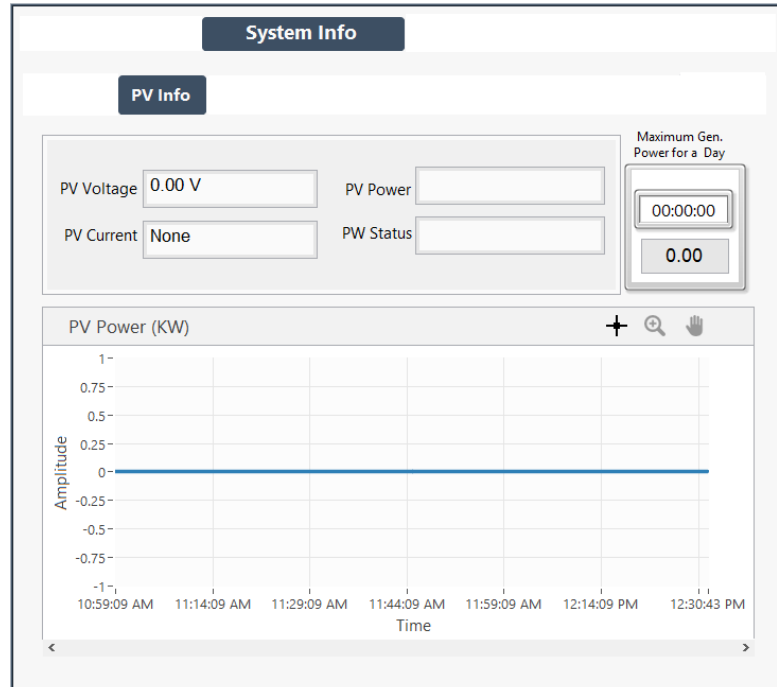
It also shows graph of AC active power in KW and Daily AC active power of full day in KW.


2.2.2.2 PV Information:

PV information page is shown below. The dashboard of PV Info shows PV Voltage, PV Power and PV Current values and PW status. This page also shows maximum power generated and the time in which it has occurred.

The graph shows the PV power in KW with respect to time.

### 2.2.2.3 Battery Information:

Battery Info dashboard shows voltage, current, temperature and state of Sirius Module as shown below.

You can also see graphs of voltage, ambient temperature, current and power of Sirius Module at the bottom of the page.
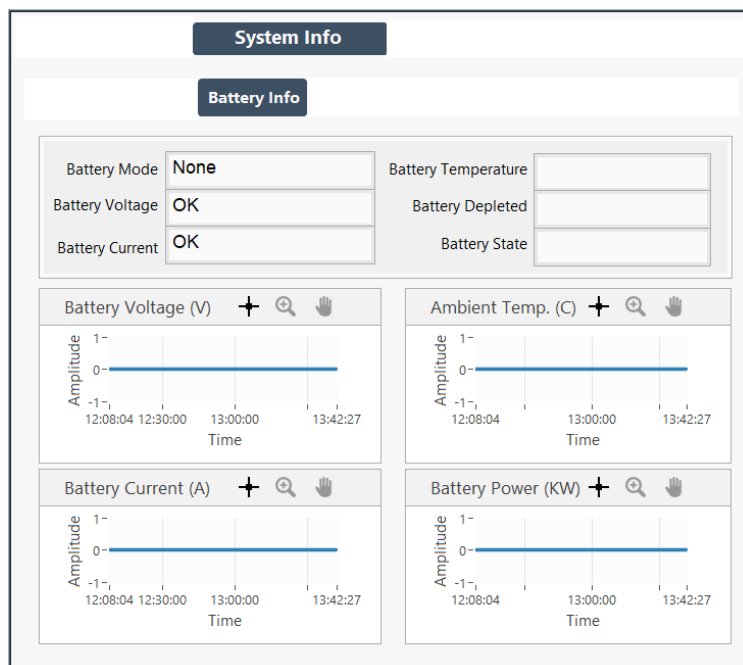
2.2.2.4 Bypass Information:

The Bypass dashboard shows the bypass voltage, bypass current, bypass active power, bypass feed in KWH and KW, bypass used and bypass consume.

The graphs of bypass page show the daily bypass used power and daily bypass feeding power in KW.
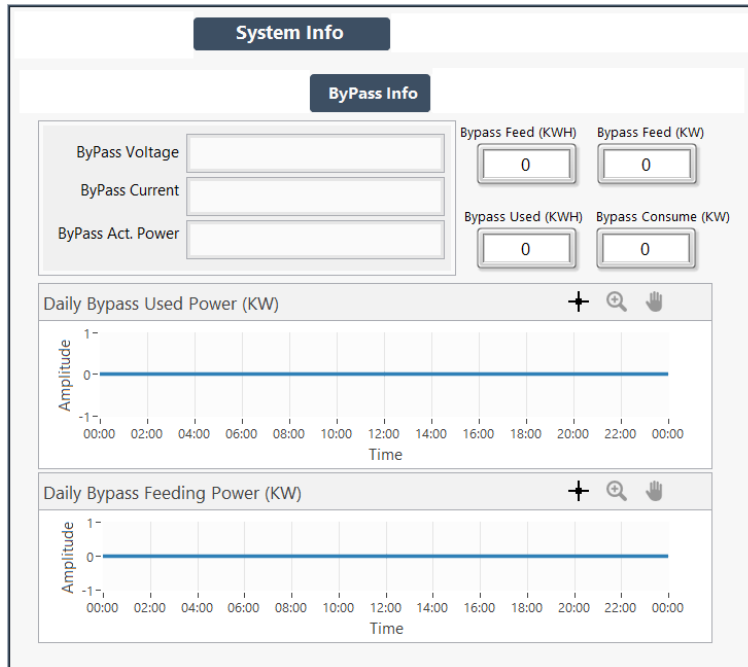

2.2.2.5 Output Information:

The Output Info page shows Output Load, Output Apparent Power, Output Voltage, Output Current, Output Active Power, Output Frequency, Output State, Output PW Factor. It also shows the maximum Output For a day and the time it has occurred.

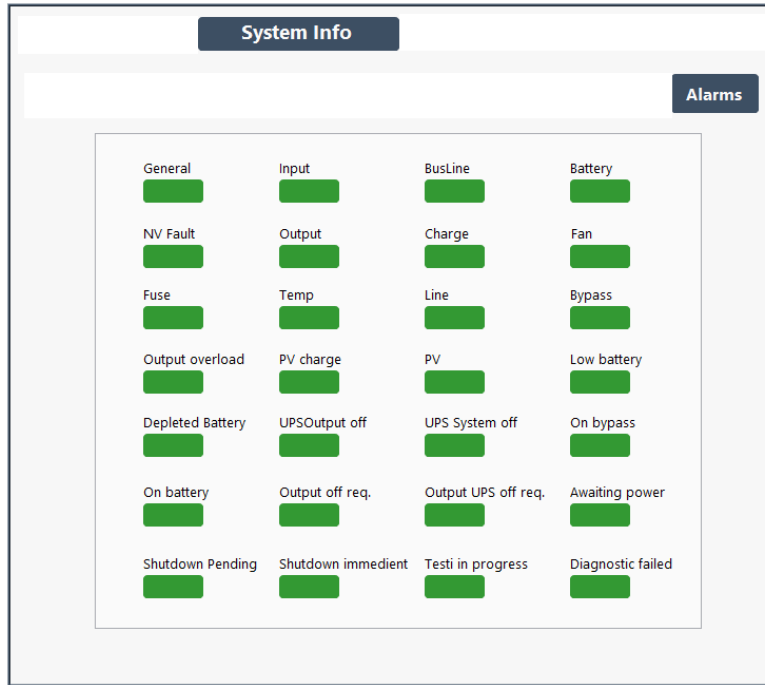The Graph shows the Output Active Power in KW.
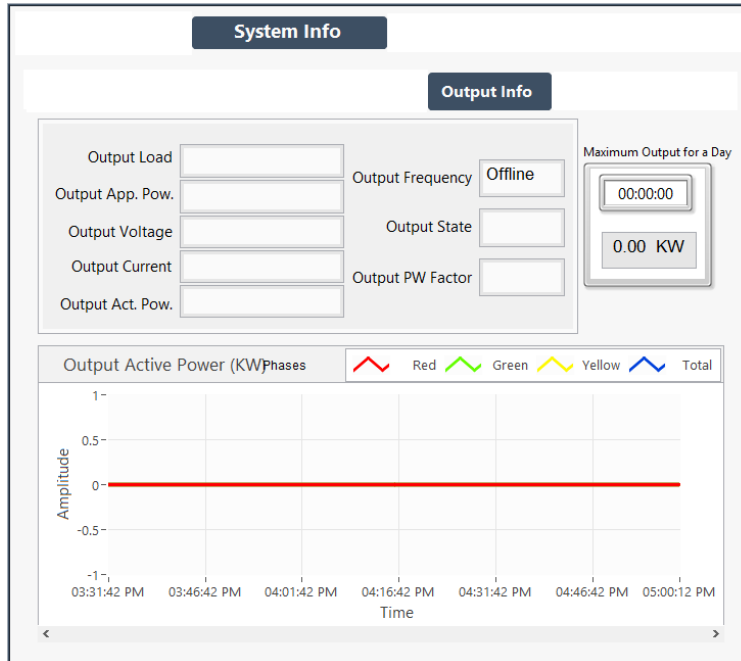
2.2.2.6 Other Information:

This page gives information about ambient temperature of Energy Server, Total CO_2 emissions and Run Mode. You can see ambient temperature graph in the page shown below.
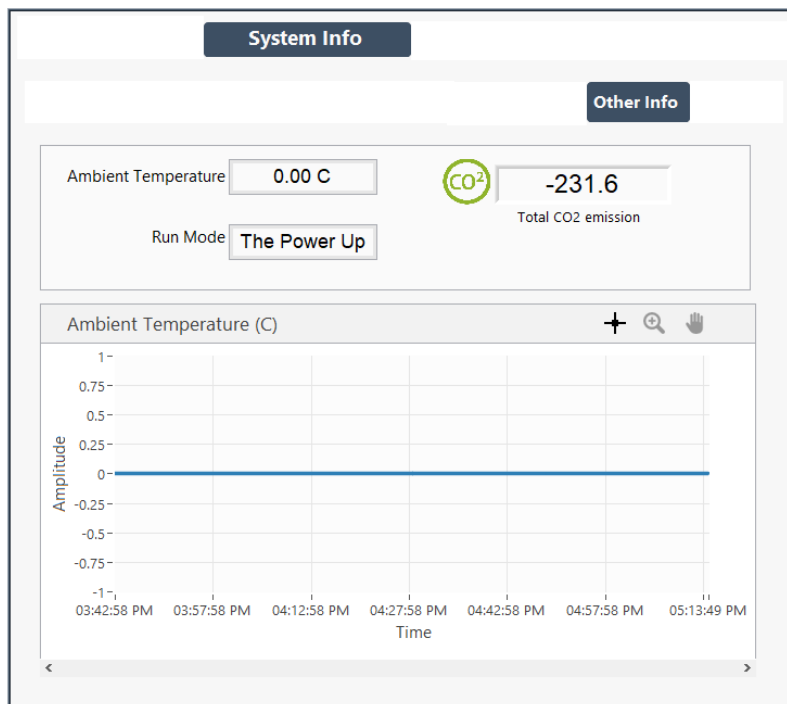
2.2.2.7 Alarms:

This page shows all the alarms and their set values.

2.2.3   Reports:

Report page contains the reports of Dashboard measurement's, Input parameters, Battery parameters, bypass, Output parameters as shown below:

Reports

Input Table

Input State						

Reports

Battery Table

Battery Voltage (V)	Battery Current (A)	Battery Tempereture (C)	Battery Depleted	Battery Status
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			
OK	OK			

Reports

Dashboard Table

Date and Time	Output Frequency (Hz)	Output Factory	Output Voltage (V)	Output Current (A)
16-48 - 11-25-19	Offline			
16-47 - 11-25-19	Offline			
16-46 - 11-25-19	Offline			
16-45 - 11-25-19	Offline			
16-44 - 11-25-19	Offline			
16-43 - 11-25-19	Offline			
16-42 - 11-25-19	Offline			
16-41 - 11-25-19	Offline			
16-40 - 11-25-19	Offline			
16-39 - 11-25-19	Offline			
16-38 - 11-25-19	Offline			
16-37 - 11-25-19	Offline			
16-36 - 11-25-19	Offline			
16-35 - 11-25-19	Offline			
16-34 - 11-25-19	Offline			
16-33 - 11-25-19	Offline			
16-32 - 11-25-19	Offline			
16-31 - 11-25-19	Offline			
16-30 - 11-25-19	Offline			
16-29 - 11-25-19	Offline			
16-28 - 11-25-19	Offline			
16-27 - 11-25-19	Offline			
16-26 - 11-25-19	Offline			

Reports

ByPass Table

| Date and Time	Bypass Voltage (V)	ByPass Current (A)
17-27 - 11-25-19		
17-26 - 11-25-19		
17-25 - 11-25-19		
17-24 - 11-25-19		
17-23 - 11-25-19		
17-22 - 11-25-19		
17-21 - 11-25-19		
17-20 - 11-25-19		
17-19 - 11-25-19		
17-18 - 11-25-19		
17-17 - 11-25-19		
17-16 - 11-25-19		
17-15 - 11-25-19		
17-14 - 11-25-19		
17-13 - 11-25-19		
17-12 - 11-25-19		
17-11 - 11-25-19		
17-10 - 11-25-19		
17-09 - 11-25-19		
17-08 - 11-25-19		
17-07 - 11-25-19		
17-06 - 11-25-19		
17-05 - 11-25-19		

2.2.4   Graphs:

The graph page shows monthly total generated solar energy graph and yearly total generated solar energy graph as shown below:
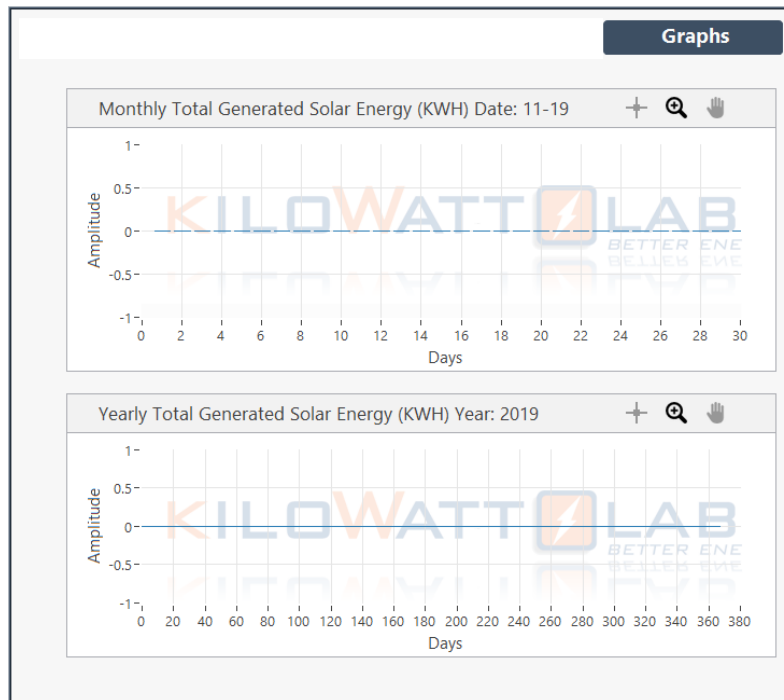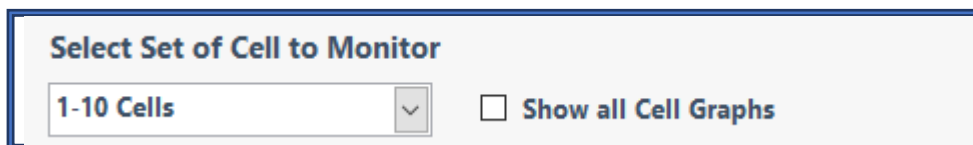
3. Sirius Module Monitoring:

3.1 Cell Dashboard:
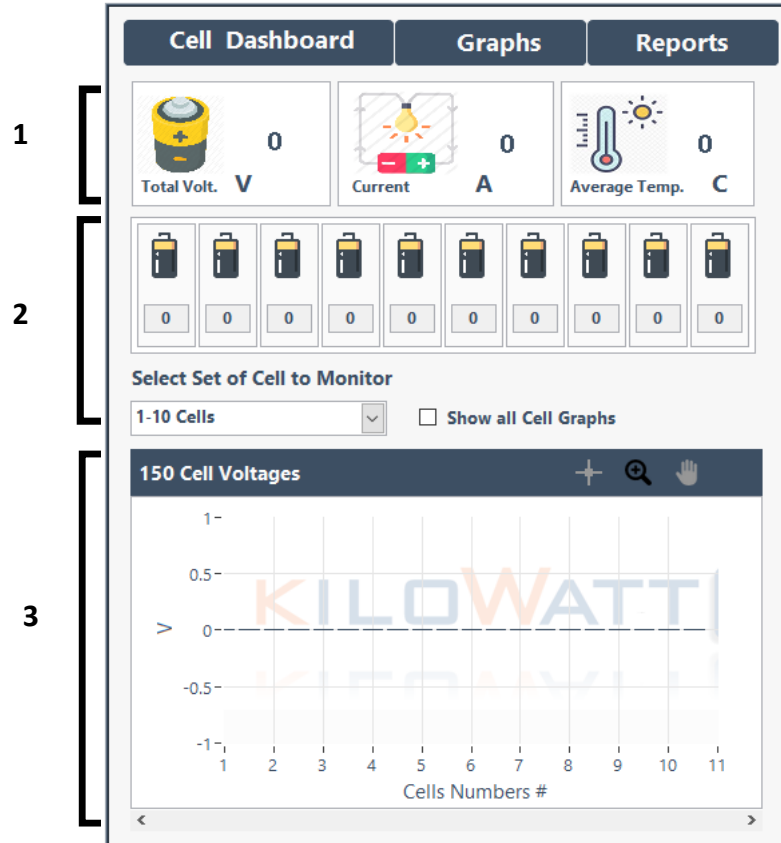
1. Microgrid monitors total Voltage, Current and average temperature of all Sirius Modules connected in parallel or in series.

2. You can see Modules voltages and theirs graph. You can also select the number of cells to monitor from the drop down-menu. You will see only 10 Modules voltages and Graphs at a time.
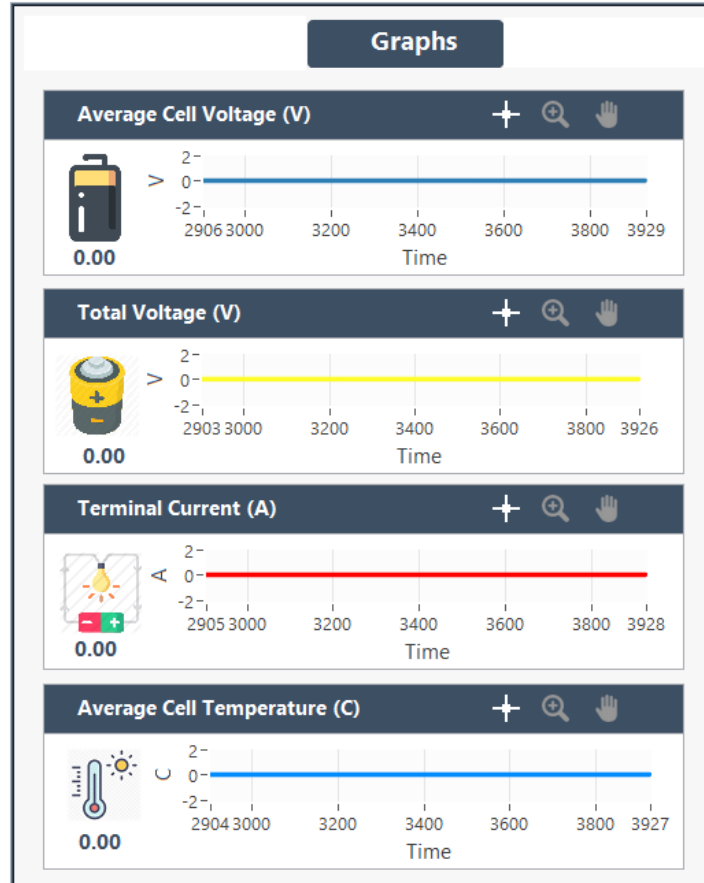
If you want to see all Cells Voltage graph, click on the check box as shown below.

Note: The term cell is used for one Sirius Module when they are connected in parallel or in Series.

3.2 Graphs:

The Graph page shows the Average Voltage, Total Voltage, Terminal Curent and Average Temperature of all Sirius Modules.

3.3 Reports:

Reports page shows dashboard measurements reports such as total voltage, current and temperature and Cell measurements such as cells voltage and temperature as shown below.

1. **Dashboard Measurements:**

2. Cell Measurements:

Click on Cell measurements, two sub headings will appear. You can see cell voltages and cell temperature of each cell by clicking the respective button.

4. FAQ:

Q. What if Energy Server is not communicating with PC properly?

A. (i) Be sure that the driver for Energy Server is installed to PC.

   (ii) Change USB port which I used for Energy Server or try to change the port.