

Micro Grid View

User Manual

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1. How to Install Microgird VIEW:

Follow the steps below to install Microgrid VIEW:

- \rightarrow Go to Amber & Waseem website "https://www.amberandwaseem.com/".
- \rightarrow 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.

amber& waseem	Home	About - Applications Products	News/Media Events	Projects Downloads - Opportunities -
	SiriusVIEW Installation Guide	SV 3.1.12	Download	
	SiriusVIEW Montoring Getting Started Guide	SV 3.1.12	Download	
	SiriusVIEW Multi Getting Started Guide	SV Multi 3.1.12	Download	
	SiriusVIEW Setup	SV 3.1.12 Setup	Download	
	SiriusVIEW Multi Setup	SV 3.1.12 Multi Setup	Download	
	Sirius SD Logger Time Setter Guide	SD Logger 3.1.1	Download	-
	Sirius SD Logger Time Setter	SD Logger 3.1.1 Setup	Download	-
	SiriusVIEW Multi Monitoring Application UDP	SV Multi Monitoring 3.1.12 Setup	Download	-
	SiriusVIEW UDP	SV UDP 3.1.12 Setup	Download	
	MicroGridVIEW	MicroGridVIEW 3.1.12 Setup	Download	
	L			-

→ Double click on Microgrid VIEW Monitoring Application to execute it. A Log-in screen will appear as illustrated below.





 \rightarrow Enter the default Username and Password in the login screen.

Default Username: admin

Default Password: 123



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



SIRILS VIEW	SIRILIS VIEW
LOGIN SCREEN	LOGIN SCREEN

 $\rightarrow~$ In the drop-down menu, select the COM port and click OK.



Microgrid View-User Manual

2. Microgrid View Description:



2.1 Application Banner:

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

	Time: 17:56:27 Date: 24-11-19	Energy Server OFFLINE
MICRO GRID VIEW	User: Admin	Module Monitoring OFFLINE

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.

Microgrid View-User Manual

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3



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.

Microgrid View-User Manual

		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	Please refer to section 6 in	n Energy Server Manual for the working
	Architecture of	principle of the Energy Se	rver.
	Energy Server		
3	Graphs	Daily Generated Power	This graph shows the daily generated power
		(KW)	with respect to time in hours.
		Daily Consumed Power	This graph shows the daily consumed power
		(KW)	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.

Kilowattlabs Micro Grid View			– 🗆 X
KILOWATT LABS		Time: 12:12:07 Date: 25-11-19	Energy Server OFFLINE
MICRO GRID VIEW		User: Admin	Module Monitoring OFFLINE
Main System Info	Reports Graphs	Cell Dashboard Graph	s Reports
AC Info PV Info Battery Info ByPass I	nfo Output Info Other Info Alarms	0	
Input Power Factor 0.00	Input Current	Total Volt. V Current A	Average Temp. C
Input Frequency Offline	Input Act. Power		
Input Voltage	Input State		0 0 0 0
AC Act. Power (KW) 🕂 🔍 🖐	Daily AC Act. Power (KW) 🕂 🔍 🖐	Select Set of Cell to Monitor	ell Graphs
1- Red 0.75- Green 0.5- Blue	0.8-	150 Cell Voltages	+ 🔍 🖐
9 0.25-	9.0.6-	1-	
11 o-	ti de car	0.5-	
₩ -0.25-	¥ 0.4-		
-0.75 -	0.2-		
-1-	0-	-0.5 -	
10:59:09 11:19:09 11:39:09 12:12:08 Time	18:00 00:00 06:00 12:00 18:00 00:00 Time	-1-,	
< >>	< >	1 2 3 4 5 6 7 Cells Numbers	8 9 10 11 #
		<	>
		1	

Microgrid View-User Manual

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.

Input Power Factor	0.00	Input Current
Input Frequency	Offline	Input Act. Power
Input Voltage		Input State
AC Act. Power (KW)	+ ⊕, ⊎	Daily AC Act. Power (KW) 🕂 🔍 🎳
1- 0.75- 0.5- 0.25-	Red Green Blue Total	рани и пределага и преде И пределага и пре
0- -0.25- -0.5-		U.2-

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.

		Sys	tem Info	D					
ľ	PV Info								
PV Voltage PV Current	0.00 V None		F	PV Powe	r			Maxin Power	num Gen. for a Day :00:00
PV Powe	er (KW)						-	- ⊕	-
1- 0.75- 0.5- 0.25- 0- 0- 0- 0- 0- 0- 0.5- -0.75- -0.75- -0.75- -1- 10:59:09 4	M 11:14:	09 AM 1	1:29:09 AM	11:44:3	99 AM	11:59:09 AM	12:14:09	PM	12:30:43 PN
<				I	me				

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.

	System Info	
	Battery Info	
Battery Mode Battery Voltage	None OK	Battery Temperature Battery Depleted
Battery Current	ок	Battery State
Battery Volta	ge (V) + Q U 13:00:00 13:42:27 Time	Ambient Temp. (C) + Q U 0- 1- 12:08:04 13:00:00 13:42:27 Time
Battery Curre	nt (A) 🕂 🔍 🖑	Battery Power (KW) 🕂 🔍 🎳
9 1- 1- 12:08:04 12:30	000 13:00:00 13:42:27 Time	U-1- 12:08:04 13:00:00 13:42:27 Time

Microgrid View-User Manual

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.

S	ystem Info		
	ByPass Info		
ByPass Voltage ByPass Current		Bypass Feed (KWH)	Bypass Feed (KW)
ByPass Act. Power		Bypass Used (KWH)	Bypass Consume (K
Daily Bypass Used Power (KW)	+	- ⊕, ⊎
9 1- 0- -1- 00:00 02:00 04:00 06:0	0 08:00 10:00 12:00 1 Time	4:00 16:00 18:00 20:0	0 22:00 00:00
Daily Bypass Feeding Powe	er (KW)	+	• 🔍 🖕
0- 0-			

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.

		Output Info	
Output Load Output App. Pow. Output Voltage Output Current Output Act. Pow.		Output Frequency Offline Output State Output PW Factor	Maximum Output for a D 00:00:00 0.00 KW
Output Active Po	wer (KWPhases	Red A Green	Vellow Notal

2.2.2.6 Other Information:

This page gives information about ambient temperature of Energy Server, Total CO2 emissions and Run Mode. You can see ambient temperature graph in the page shown below.

		System Info				
					Other I	nfo
Ambient T	emperature Run Mode	0.00 C The Power Up	,	- Total	231.6 CO2 emission	
Ambient	Temperature	e (C)			+ (Q. 🖑
1-						
0.75-						
0.5-						
-0.25-						
₹ -0.25-						
-0.5 -						
-0.75-						
-1-, 03:42:58 P	M 03:57:58 PN	1 04:12:58 PM	04:27:58 PM Time	04:42:58 PM	04:57:58 PM	05:13:49 PM
1						>

Microgrid View-User Manual



2.2.2.7 Alarms:

System Info Alarms BusLine General Input Battery NV Fault Output Charge Fuse Temp Line Bypass Output overload PV charge D\/ Low battery Depleted Battery UPSOutput off UPS System off On bypass On battery Output off req. Output UPS off req. Awaiting power Shutdown Pending Shutdown immedient Testi in progress Diagnostic failed

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:

				-	
Dashboard Table					
Date and Time	Output Frequency (Hz)	Output Factory	Output Voltage (V)	Output Current (A)	T
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				

Microgrid View-User Manual

			Re	eports		
	Input Table					
Input State						
						_
<						>

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

			Reports		
Dashboard Table					
Date and Time	Output Frequency (Hz)	Output Factory	Output Voltage (V)	Output Current (A)	Τ
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				
10.00 11.00 10	om:				

		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			
27.01 11.02.00			

				Output Tab	le
				output tub	
Date and Time	Output Frequency (Hz)	Output Factory	Output Voltage (V)	Output Current (A)	
17-01 - 11-25-19	Offline				
17-00 - 11-25-19	Offline				
16-59 - 11-25-19	Offline				
16-58 - 11-25-19	Offline				
16-57 - 11-25-19	Offline				
16-56 - 11-25-19	Offline				
16-55 - 11-25-19	Offline				
16-54 - 11-25-19	Offline				
16-53 - 11-25-19	Offline				
16-52 - 11-25-19	Offline				
16-51 - 11-25-19	Offline				
16-50 - 11-25-19	Offline				
16-49 - 11-25-19	Offline				
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				

2.2.4 Graphs:

The graph page shows monthly total generated solar energy graph and yearly total generated solar energy graph as shown below:



Microgrid View-User Manual

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.

Microgrid View-User Manual



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:

			Reports
Dashboard Meas.			
Date and Time	Total Voltage	Current	Average A
Time 09-30-04 Date 26-11-19	0.00	0.00	0.00
Time 09-29-01 Date 26-11-19	0.00	0.00	0.00
Time 09-28-07 Date 26-11-19	0.00	0.00	0.00
Time 09-27-04 Date 26-11-19	0.00	0.00	0.00
Time 09-26-01 Date 26-11-19	0.00	0.00	0.00
Time 09-25-07 Date 26-11-19	0.00	0.00	0.00
Time 09-24-04 Date 26-11-19	0.00	0.00	0.00
Time 09-23-01 Date 26-11-19	0.00	0.00	0.00
Time 09-22-07 Date 26-11-19	0.00	0.00	0.00
Time 09-21-04 Date 26-11-19	0.00	0.00	0.00
		- 1	
			<u> </u>

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.

				R	eports
			Cell Mea	asureme	ents
Cell Voltage		Cell Temperature			
Time and Date	Cell 1	Cell 2	Cell 3	Cell 4	Cell 5 ^
Time 09-27-04 Date 26-11-	0.00	0.00	0.00	0.00	0.00
Time 09-26-01 Date 26-11-	0.00	0.00	0.00	0.00	0.00
Time 09-25-07 Date 26-11-	0.00	0.00	0.00	0.00	0.00
Time 09-24-04 Date 26-11-	0.00	0.00	0.00	0.00	0.00
Time 09-23-01 Date 26-11-	0.00	0.00	0.00	0.00	0.00
Time 09-22-07 Date 26-11-	0.00	0.00	0.00	0.00	0.00
Time 09-21-04 Date 26-11-	0.00	0.00	0.00	0.00	0.00
				- é	-
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					~
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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.