Infinity S (NE-S) +24V/-48V or -48V/+24V or -48V/-58V System

NES2448-23-AC1-PS4-DC1E-LVBD-LVLD-7FTR-4BT4

- **+24V/-48V – 2448**
  -48V/+24V – 4824
  -48V/-58V – 4858
  -48V/+12V – 4812
- **19” wide – 19**
  23” wide – 23
- **2 Molex Mini-Fit Sr Connectors (23” only) – AC1**
  IEC-320 C20 per slot – AC3
  Term Block (19” only) – AC5
  Term Block (23” only) – AC5H
  3 phase delta Term Block (19” only) – AC6
  3 phase delta wye Term Block (19” only) – AC7
- **# of Power Slots**
- **1 Distribution – 1**
  2 Distributions – 2
- **<blank> – no LVBD**
  LVBD – LVBD
- **<blank> – no secondary LVLD**
  LVLD – Secondary LVLD
- **<blank> – no rack**
  7FTR – 7ft Rack
  42INR – 42in Rack (23” only)
  28INR – 28in Rack (23” only)
- **<blank> – No Batt trays**
  4BT4 – 4 Batt Trays e/w Batt Disconnect CB per tray
- **Distribution with Pulsar Plus Controller – E**
  Distribution with Pulsar Plus Controller, rear bulk battery inputs, No LVD allowed – ES
  Distribution with Pulsar 200 Controller – EN
  Distribution with Pulsar 200 Controller, rear bulk battery inputs, No LVD allowed – ESN

Infinity NE-S Power System (Pulsar Plus)

Infinity NE-S Power System (with Pulsar 200 Controller)

Read and follow all safety statements and precautions in this guide.
Refer to Infinity S Power System Brochure for details and accessories.

Tools required:

- Cable Crimpers
- Screw Drivers (#1 Flat & #2 Phillips)
- Wire cutters and strippers
- Torque wrench (0-240 in-lb / 28 Nm)
- 5/16,” 7/16” and 1/2” nut drivers

Document: 850022389

© 2025 OmniOn Power Inc. All rights reserved.

Step 1 - Mount the System

Mount the system with a minimum gap of 3 inches behind the system to allow proper airflow.

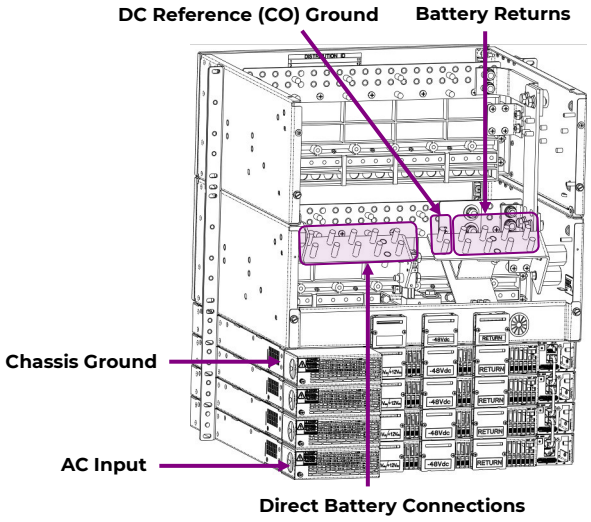
1. Attach the system to the frame using a minimum of twelve (six on each side) 12-24 screws (provided). Torque to 35 in-lb (7.3 Nm) - 5/16" socket.

Step 2 - Connect Chassis and DC Reference (CO) Ground

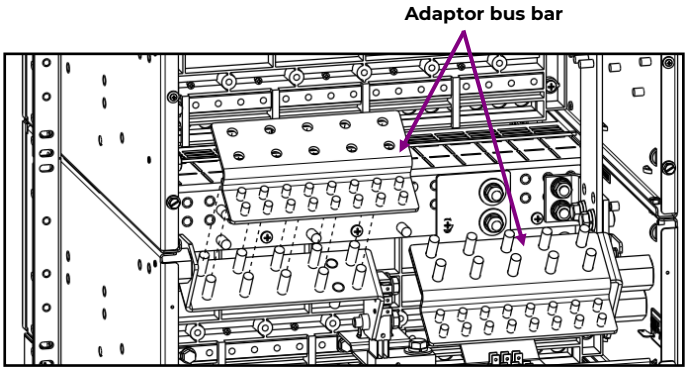
1. Chassis Ground lug - #10 or 1/4" on 5/8" centers (not provided).
   Minimum 10 AWG recommended.
   Torque to 10-32 screws to 30 in-lb (3.4 Nm) – 5/16" Socket.
2. DC reference ground lug - 5/16" or 3/8" on 1" centers (not provided).
   Torque to 160 in-lb.

Note: If connecting chassis ground to frame surface remove non-conductive frame coating and apply antioxidant for connection.

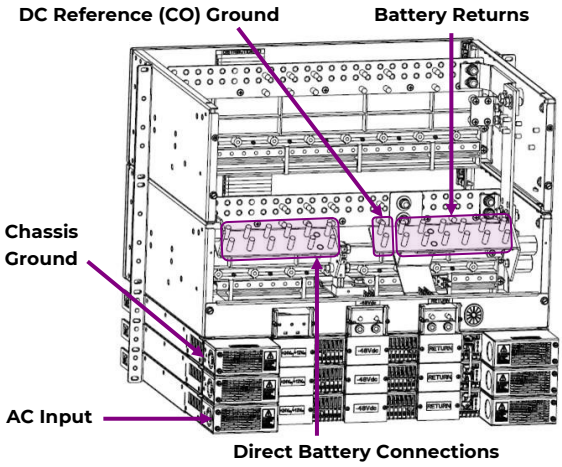
19" Dual Voltage system Without adaptor bus bars



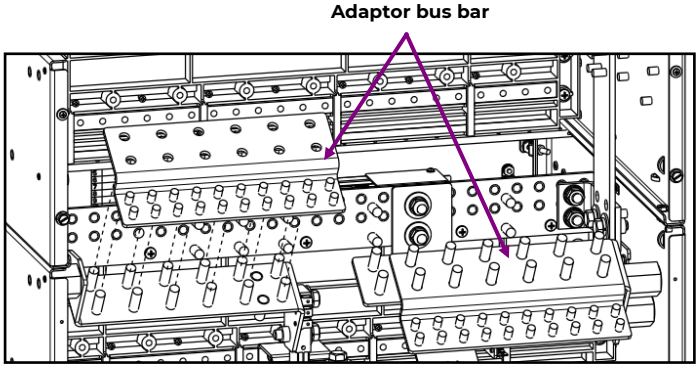
19" Dual Voltage system With adaptor bus bar kit (Exploded)



23" Dual Voltage system Without adaptor bus bars

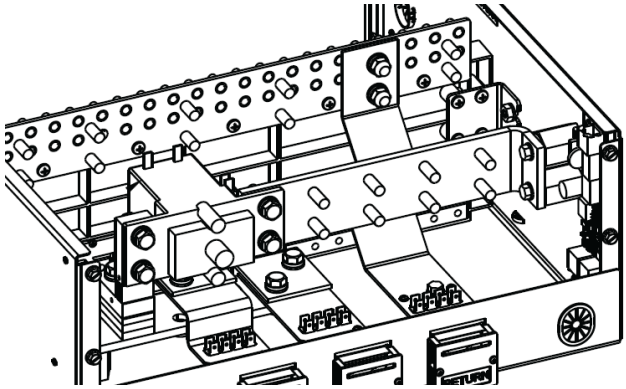
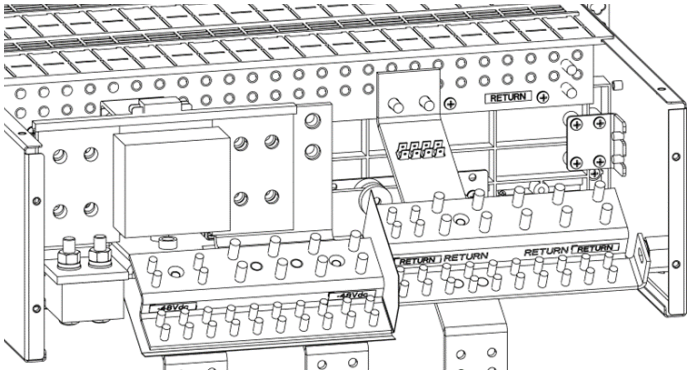


23" Dual Voltage system With adaptor bus bar kit (Exploded)



OmniOn Power is a trademark of OmniOn Power Inc. All other trademarks belong to their respective owners.

© 2025 OmniOn Power Inc. All rights reserved.

19” Dual Voltage system with Optional LVD	23” Dual Voltage system with Optional LVD
	

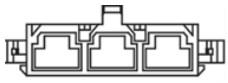
Step 3 - Connect AC inputs

Connect 110/200/240/277 V_{AC} at rear of each rectifier shelf.

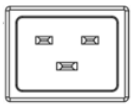
Danger: Turn OFF and lock-out tag-out the AC source before making AC connections. When connecting to AC mains, follow all local and national wiring rules.

Caution: When routing AC ensure cables do not come in contact with sharp or rough surfaces that may damage insulation and cause a short circuit.

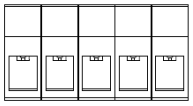
Rectifiers numbers are labeled at each AC input.



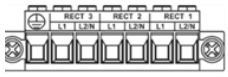
AC1 – Molex



AC3 - IEC



AC5H - TB 23”



AC5 – TB 19”

AC6 – TB 19”
3 ΦDelta

AC7 – TB 19”
3 ΦWye

AC terminal connections are labeled at each position (L1, L2/N, and Gnd).

AC Terminal Block is in the AC box on the rear of the rectifier shelf

Connect AC input cord to the detachable input terminal block in the wiring box – knock out for ¾” conduit or cord grip. Strip and torque per the table. Pull on wire to verify secure connection.

AC Input	Rectifiers/feed	19”	23”	AWG max	Strip Wire (mm)	Torque In-lb(Nm)
AC1 - Molex mini-fit SR	2		Yes	8	n/a	-
AC3 - IEC-320 C19	1	Yes	Yes	12	n/a	-
AC5H - Terminal Block	1		Yes	10	9	5 (0.6)
AC5 - Terminal Block	1	Yes		10	10	7 (0.75)
AC6 - Term Block 3-phase Delta	3	Yes		6	12	16 (1.75)
AC7 – Term Block 3-phase Wye	3	Yes		6	12	16 (1.75)

© 2025 OmniOn Power Inc. All rights reserved.

Information: Rectifier Options

Rectifier		Input	DC Output		Recommended AC Breaker				
			Volts	Amps	AC1	AC3	AC5 AC5H	AC6	AC7[2]
R ECO	NE050ECO48ATEZ	200-277V_{AC}, 15A, 50-60Hz	48V	50A	40A	20A	20A	35A	20A
		100-120V_{AC}, 15-12A, 50-60Hz	48V	22A	40A	20A	20A	-	20A
		(±30) 60 TO (±200) 400V_{DC}, 11A MAX	48V	50A	-	-	15A	-	-
R	NE075AC48ATEZ / NE075AC48ATEZ+	200-277V_{AC}, 22A, 50-60Hz	48V	75/50A[1]	40A	20A	30A	50A	30A
		100-120V_{AC}, 15-12A, 50-60Hz	48V	25A	40A	20A	20A	-	20A
	NE050AC48ATEZ	200-277V_{AC}, 15A, 50-60Hz	48V	50A	40A	20A	20A	35A	20A
		100-120V_{AC}, 15-12A, 50-60Hz	48V	22A	40A	20A	20A	-	20A
R	NE100AC24ATEZ	200-277V_{AC}, 15A, 50-60Hz	24V	100A	40A	20A	20A	35A	20A
		100-120V_{AC}, 15-12A, 50-60Hz	24V	44A	40A	20A	20A	-	20A
R ECO	NE100ECO24ATEZ	200-277V_{AC}, 15A, 50-60Hz	24V	100A	40A	20A	20A	35A	20A
		100-120V_{AC}, 15-12A, 50-60Hz	24V	44A	40A	20A	20A	-	20A
		(±30) 60 to (±200) 400V_{DC}, 11A MAX	24V	100A	-	15A	15A	-	-

[1] This rectifier will output 75A in 19" systems with AC5, AC6 or AC7 inputs and in 23" systems with AC5H inputs. All other inputs automatically de-rate the rectifier to 50A output
[2] AC7 is for use with 380-480VAC to deliver 220-277V Line to Neutral (high line) to each slot. If used with a 208V, each slot will see 120V Line to Neutral (low line) input and is limited to 1200W max output per slot

Information: Converter Options

Converter		Input	DC Output	
			Volts	Amps
C	NE070DC58A	DC 40-58 V_{DC}, 85A	58V	70A
C	NE075DC24A	DC 48V_{DC}, 54A	24V	75A

Information: AC Cord Options

IEC-Style, 8ft, 12AWG		
Part Number	**Plug**	**Length**
CC848847368	No plug	8 ft
CC848850792	5-15P	8 ft
CC848850801	5-20P	8 ft
CC848850826	6-15P	8 ft
CC848850834	6-20P	8 ft
CC848850842	L6-20P	8 ft
850044361	L5-15P	15 ft
850044362	L5-20P	15 ft
CC848895961	L6-20P	15 ft

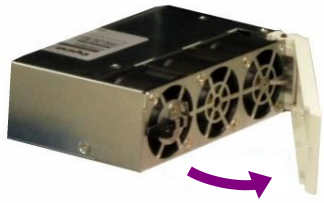
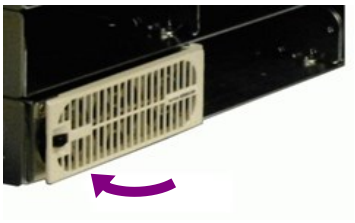
Molex mini-fit SR-Style, No Plug	
CC848822420	(2) 15 ft., 3X8AWG
848710711	(2) 10 ft., 3X8AWG
CC848830522	(2) 4 ft., 3X8AWG
CC848773515	15 ft., 10AWG SO Cord
CC848906586	10 ft., 8AWG, SO Cord

© 2025 OmniOn Power Inc. All rights reserved.

Step 4 - Rectifier Installation

Caution: The rectifier latch is not a carrying handle.

1. Slide the rectifier into the rectifier slot approximately ¾ of the way.
2. Open the faceplate by sliding the latch to the left until the faceplate releases and swings outward.
3. Slide the rectifier into the slot until it engages with the back of the shelf. Swing the faceplate closed to fully seat the rectifier. Verify the faceplate is latched.
4. Correct insertion of the rectifier will automatically add the unit to the controllers' inventory of units.

1.	2. 	3. 

To remove a rectifier:

A. Open latch fully to release and remove.
B. Enter Inventory section of controller and remove hardware to clear alarm.

Step 5 - Connect Batteries and DC Output to Loads

The figure shows the DC circuit of the system.

Battery connections are made to the battery bus.

Lug Landings: 3/8" on 1" centers (4)
1/4" on 5/8" centers (12)

Caution: Verify battery voltage and polarity with voltmeter before connecting.

Load connections are made to bullet-style distribution positions.

Distribution panels are each equipped with 26 bullet-style distribution positions. Each position is selectable between primary and secondary load output.

Lug Landings: 1/4" on 5/8" centers.

Breakers up to 250A, TPS fuses to 70A and GMT style fuses to 12A are available.

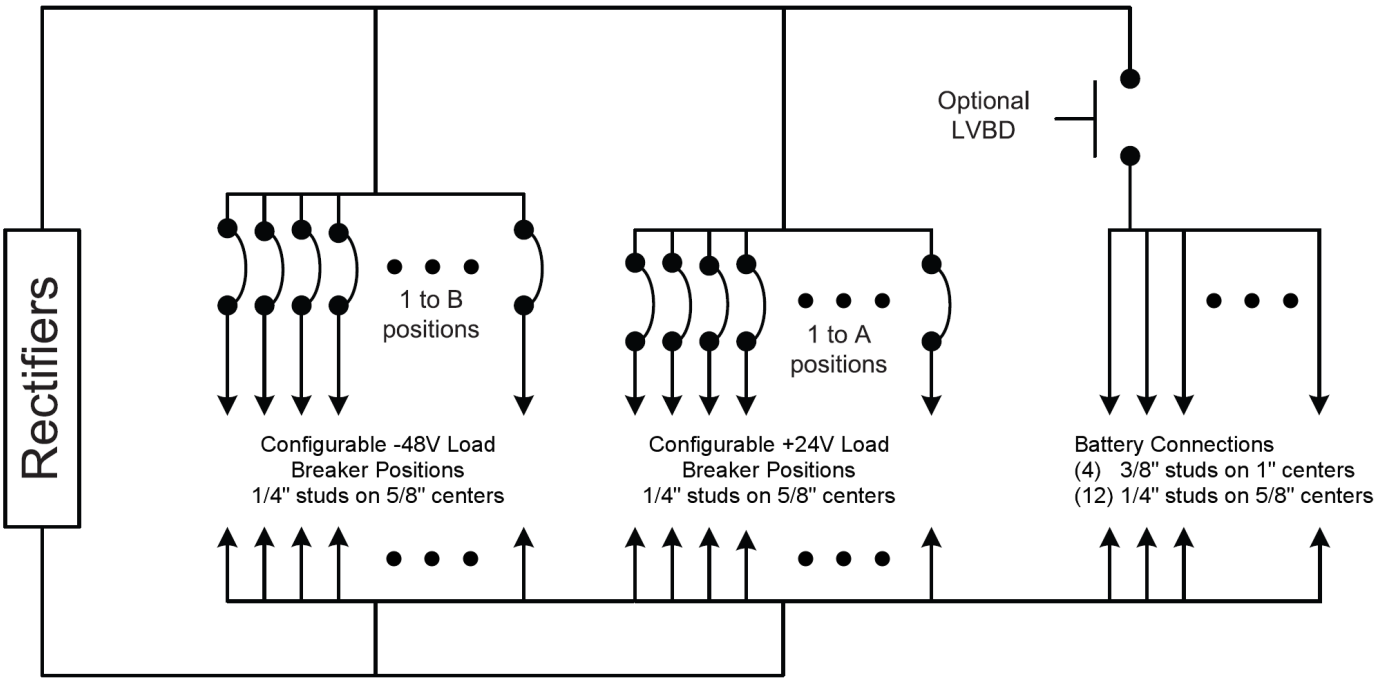
© 2025 OmniOn Power Inc. All rights reserved.

Lug Landings		
Landings	1/4-20 studs on 5/8” centers Lug tongue width 0.68” max	3/8-16 studs on 1” centers Lug tongue width 0.68” max
Torque	65 in-lb - 7/16” socket	240 in-lb - 9/16” socket

Information: Load rating

Maximum output load rating – 800A

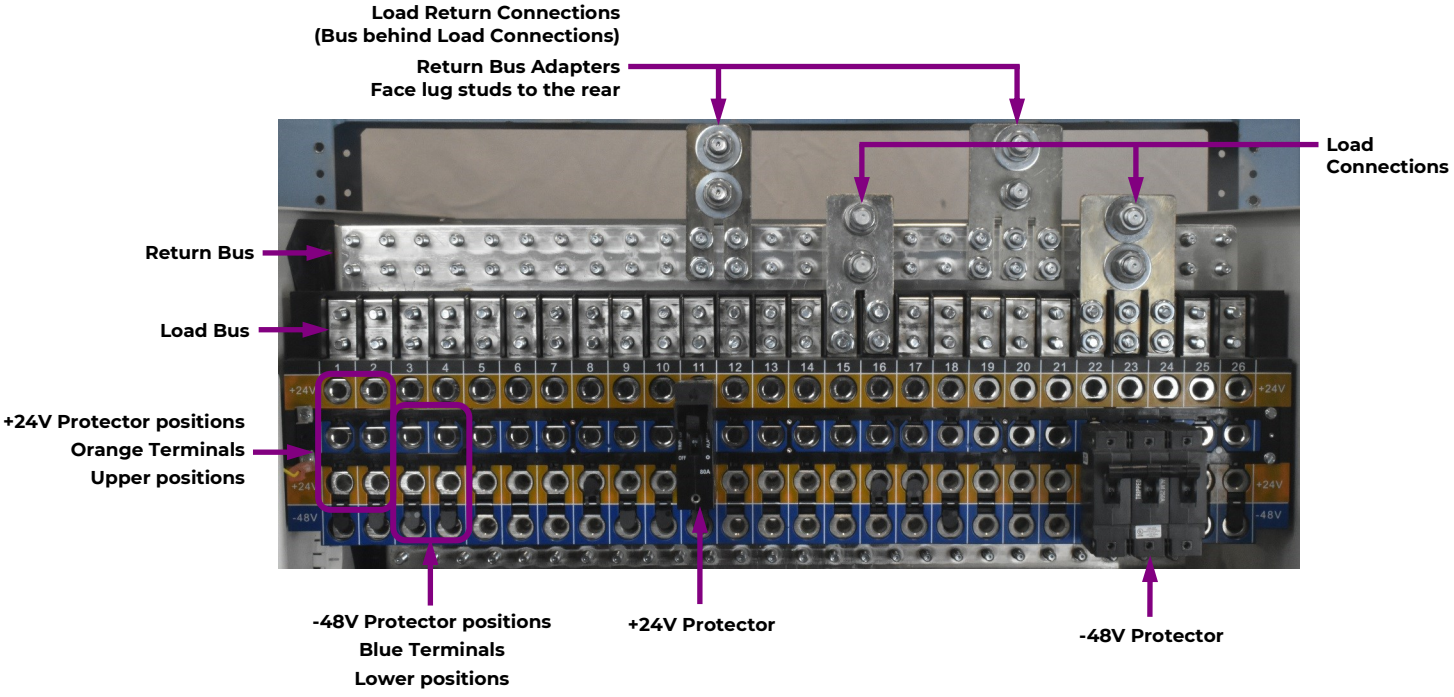
Caution: The maximum output ratings of the system is based upon rectifiers operating in the high range, 200-277V_{AC}. Operating the system at the low range (100-120V_{AC}) will limit the output of each rectifier to just 1200Wmax, thus, limiting the total available DC output power to 1200W x "PS#" for the system.



A + B = 26 each for distribution Panel

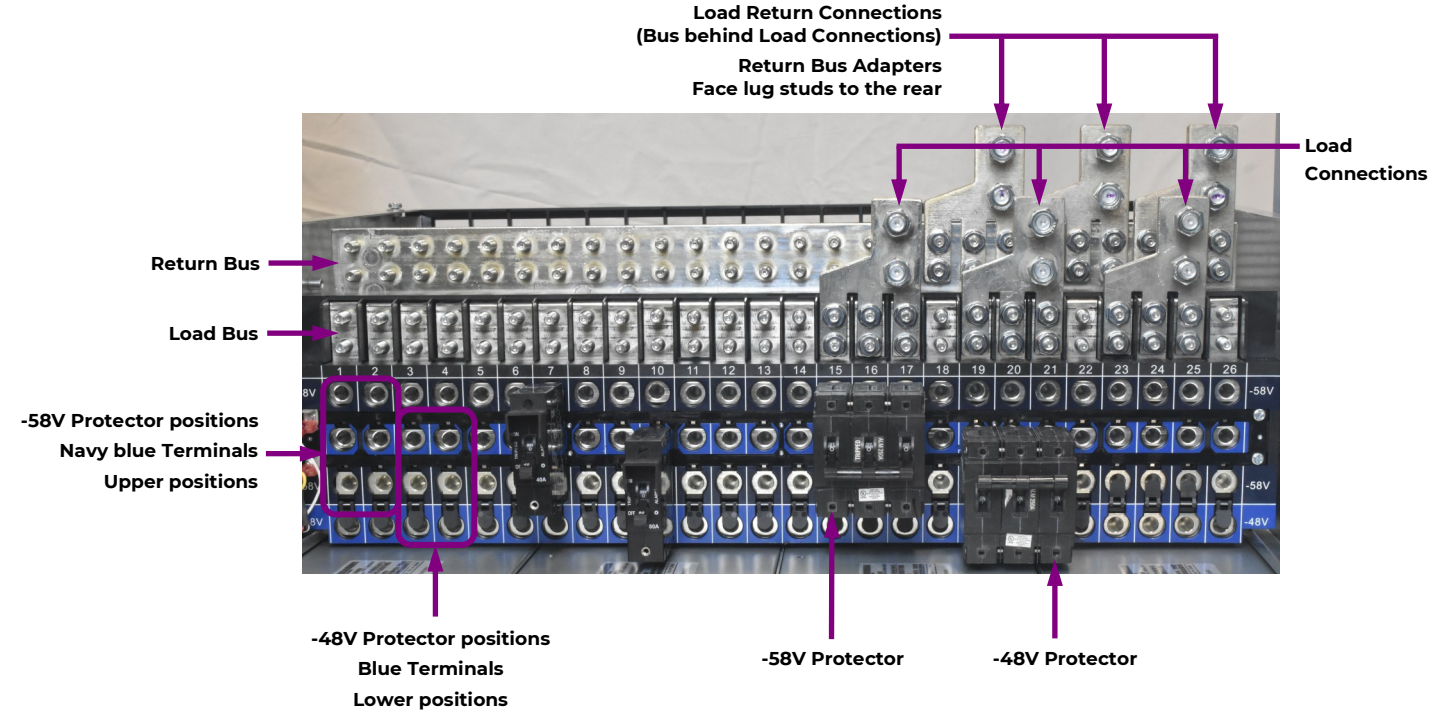
© 2025 OmniOn Power Inc. All rights reserved.

Step 5 - Connect Batteries and DC Output to Loads (continued)



Orange	+24 V_{DC} Bus
Blue	-48 V_{DC} Bus

Connections for +24V/-48V System

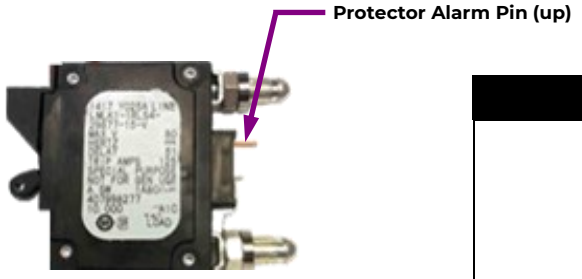


Navy Blue	-58 V_{DC} Bus
Blue	-48 V_{DC} Bus

Connections for -48V/-58V System

© 2025 OmniOn Power Inc. All rights reserved.

Step 5 - Connect Batteries and DC Output to Loads (continued)



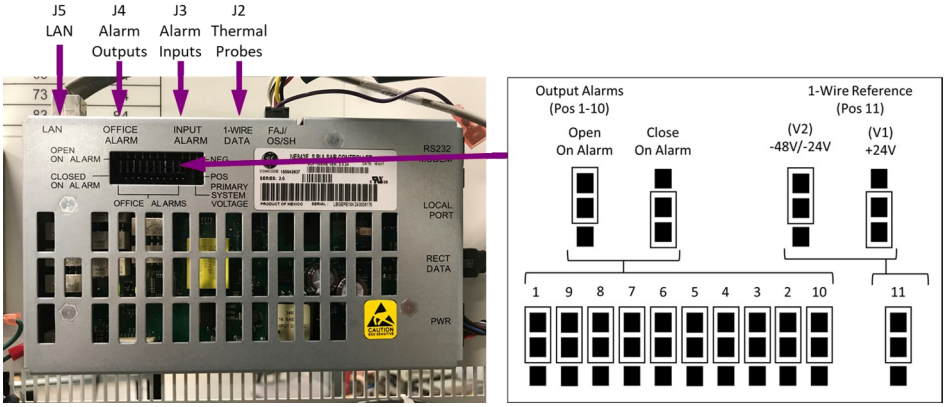
Two multi-pole adapters are required for each multi-pole breaker - figure below.

Multi-Pole Adapter Kits - 2 required per breaker				
	CC848756916	850021775	850021955	CC848756924
Poles	2	2	3	3
Lug Landings	1/4" x 5/8"	3/8" x 1"	3/8" x 1"	3/8" x 1"

Step 6 - Set Controller alarm relay jumpers (Pulsar Plus Only)

Pulsar Plus

Set jumpers 1 thru 10 for the ten alarm relays as Close on Alarm or Open on Alarm; Factory default setting is Open on Alarm.



Step 7 - Controller Connections

Connect per site engineering instructions.

See Information Controller Connections & Information Battery Connections.

Step 8 - Initial Startup

Verify that all AC, DC, GND and Controller connections are complete and secure.

Using a multimeter, Verify plant reference ground and chassis ground resistance to side ground bar is less than 0.1 Ohms. With rectifiers and converters unplugged as well as all load breakers on and AC breakers off, verify resistance of battery bus to ground is greater than 1MΩ. If being operated as an ungrounded system, verify both positive and negative bus measurement to each other and ground is greater than 1MΩ.

Turn on AC input breakers. If there are no alarms, make required adjustments to the default settings on the controller for this installation.

Step 9 - Configure Controller

Verify and edit controller basic configuration parameters per site engineering instructions.

Refer to Galaxy Pulsar Plus or Pulsar 200 Product Manual for additional information.

© 2025 OmniOn Power Inc. All rights reserved.

General Information

The following sections provide information on configuring the controller, battery monitoring, basic controller operation, and rectifier status LEDs.

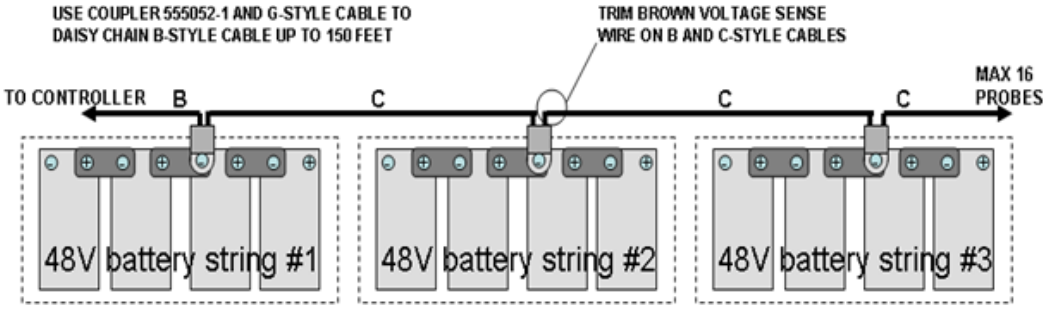
Information: Controller Default Voltage Settings and Ranges

Parameter	Range		Valve-Reg Default		Flooded		NiCd	
	-48V	+24V	-48V	+24V	-48V	+24V	-48V	+24V
Rectifier Float Selective High Voltage Shutdown	-50 to -60V	25 to 31.75V	58.50	29.25	58.50	29.25	58.50	29.25
High Float Voltage Major Alarm	-50 to -60V	25.74 to 31.75V	56.00	29.00	56.00	28.24	57.00	28.24
High Float Voltage Minor Alarm	-50 to -60V	24.75 to 31.75V	55.50	28.50	55.50	27.74	56.00	27.74
Rectifier/System Float Voltage	-42 to -60V	21 to 30V	54.00	27.00	52.08	26.04	54.40	27.20
Battery on Discharge Float Alarm	-46 to -55V	23 to 28V	53.00	26.00	51.08	25.54	51.00	25.54
Very Low Float Voltage Alarm	-40 to -57.5V	20 to 25.5V	46.00	23.00	46.00	23.00	46.00	23.00
Rectifier On Threshold	-30 to -52V	20 to 25.5V	44.00	22.00	44.00	22.00	44.00	22.00

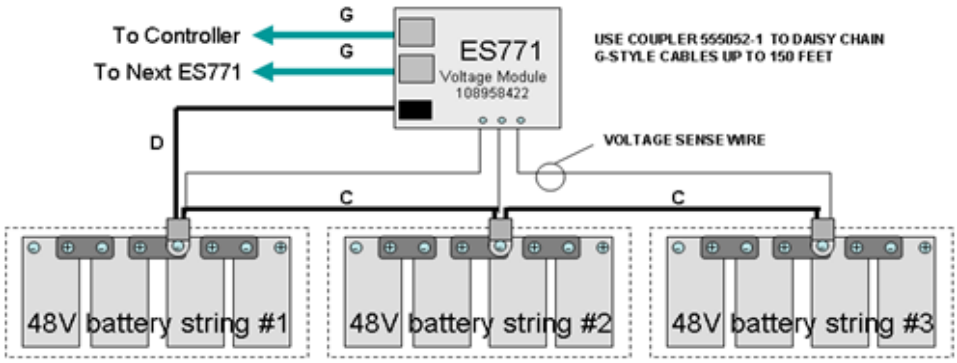
Information: Battery Monitoring Connections

Battery Monitoring is accomplished with a “Daisy Chained” series of probes on the 1-wire bus. The Probes monitor battery temperature and voltage (ES771 required to monitor the voltage). Bolt the Probe under the “–” terminal connector hardware; NOT under the connecting lug.

Note: Battery voltage monitoring not yet available for Pulsar 200.



Temperature Measurement



Temperature and Voltage Measurement (Pulsar Plus only)

© 2025 OmniOn Power Inc. All rights reserved.

Information: Battery Monitoring Connections – cables

Ordering Codes	Descriptions	Type	Controller
CC109142980	QS873A Thermal Probe	A	Pulsar Plus, Pulsar 200
CC848817024	10’ controller to thermal probe wireset	B	Pulsar Plus only
CC109157434	20’ controller to thermal probe wireset	B	Pulsar Plus only
8600485780P	10’ controller to thermal probe wireset	B	Pulsar 200 only
CC848822560	1’ thermal probe to thermal probe wireset	C	Pulsar Plus, Pulsar 200
848719803	5’ thermal probe to thermal probe wireset	C	Pulsar Plus, Pulsar 200
CC848822321	10’ thermal probe to thermal probe wireset	C	Pulsar Plus, Pulsar 200
555052-1	In-line Coupler used to couple B wiresets together up to a max of 150ft	Use with B	Pulsar Plus only
CC848873620	Bulk cable to extend length of B wireset up to 150ft total length. Specify length of bulk cable when ordering. Butt splices are included.	Use with B	Pulsar 200 only

Temperature Measurement

Ordering Codes	Descriptions	Type	Controller
108958422	ES771A Voltage Monitor Card	ES771	Pulsar Plus only
CC848791517	2 ½’ ES771A to probe wireset	D	Pulsar Plus only
CC848797290	6’ ES771A to probe wireset	D	Pulsar Plus only
848719829	10’ ES771A to probe wireset	D	Pulsar Plus only
CC848791500	4’ ES771A to ES771A or controller wireset	G	Pulsar Plus only
848652947	10’ ES771A to ES771A or controller wireset	G	Pulsar Plus only

Temperature and Voltage Measurement (Pulsar Plus only)

Information: Rectifier Status LEDs

Power Unit LEDs	
LED	Description
Norm	Normal – Green
ACF	AC Input Failure – Red
Fail	Rectifier Failure – Red
Fail	Com. Failure – Blinking Red

© 2025 OmniOn Power Inc. All rights reserved.

Pulsar Plus Controller

Information: Controller Connections (Pulsar Plus)

Alarm Outputs

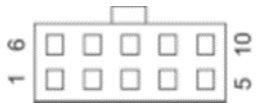
Alarm relays are factory set to Open On Alarm. If Close On Alarm is desired adjust controller alarm jumpers. See diagram in step 6 for the location of the controller alarm jumpers. Connector J4 provides access to the primary customer alarm outputs. J4 is a 20-pin latching connector.

Alarm Output Cables	
CC848890137	5 ft.
CC109157442	15ft
CC848817635	50 ft
CC848817643	150 ft

Standard Controller Alarm Output Defaults		Pin	Color Option 1	Color Option 2
PCR	Power Critical	1	BL	BL
PCR_C	Power Critical_C	11	W	BL/BK
PMJ	Power Major	2	O	O
PMJ_C	Power Major_C	12	W	O/BK
PMN	Power Minor	3	G	G
PMN_C	Power Minor_C	13	W	G/BK
R1	Battery On Discharge	4	BR	W
R1_C	Battery On Discharge_C (BD_C)	14	W	W/BK
R2	Very Low Voltage (VLV)	5	S	BK
R2_C	Very Low Voltage_C (VLV_C)	15	W	BK/W
R3	Fuse Alarm Major (FAJ)	6	BL	BL/W
R3_C	Fuse Alarm Major_C (FAJ_C)	16	R	BL/R
R4	AC Fail (ACF)	7	O	O/R
R4_C	AC Fail_C (ACF_C)	17	R	R
R5	Rectifier Fail (RFA)	8	G	G/W
R5_C	Rectifier Fail_C (RFA_C)	18	R	R/G
R6	Mult. Rectifier Fail (MRFA)	9	BR	W/R
R6_C	Mult. Rectifier Fail_C (MRFA_C)	19	R	R/W
R7	High Voltage (HV)	10	S	BK/R
R7_C	High Voltage_C (HV_C)	20	R	R/BK

Alarm Inputs

Default alarm descriptions may be changed as needed using web pages or Easyview2. J3 is a 10-pin latching connector.



Alarm Input Cables	
CC848890153	5 ft.
CC848865980	15ft
CC848817651	50 ft
CC848817668	150 ft

Standard Controller Alarm Input Defaults	J3 Pin	Color
Air Con Fail	1	BK
Air Con Fail_Return	8	V
Door Open	2	BR
Door Open_Return	8	V
Aux PMJ Input	3	R
Battery Test/GSTR	4	O
Battery Test_Return	9	S
EPO	5	Y
EPO_Return	10	W
Hi ext. Temp.	6	G
Hi ext. Temp._Return	8	V
Low ext. Temp.	7	BL
Low ext. Temp._Return	8	V

© 2025 OmniOn Power Inc. All rights reserved.

Pulsar Plus Controller (continued)

Information: Controller Basic Operation (Pulsar Plus)

All user configurable parameters can be accessed from the front panel, however user convenience and visibility is enhanced by access through the LAN port using the built-in web pages.

Configuration > Communication Ports > Network Settings > DHCP > mode, to SERVER

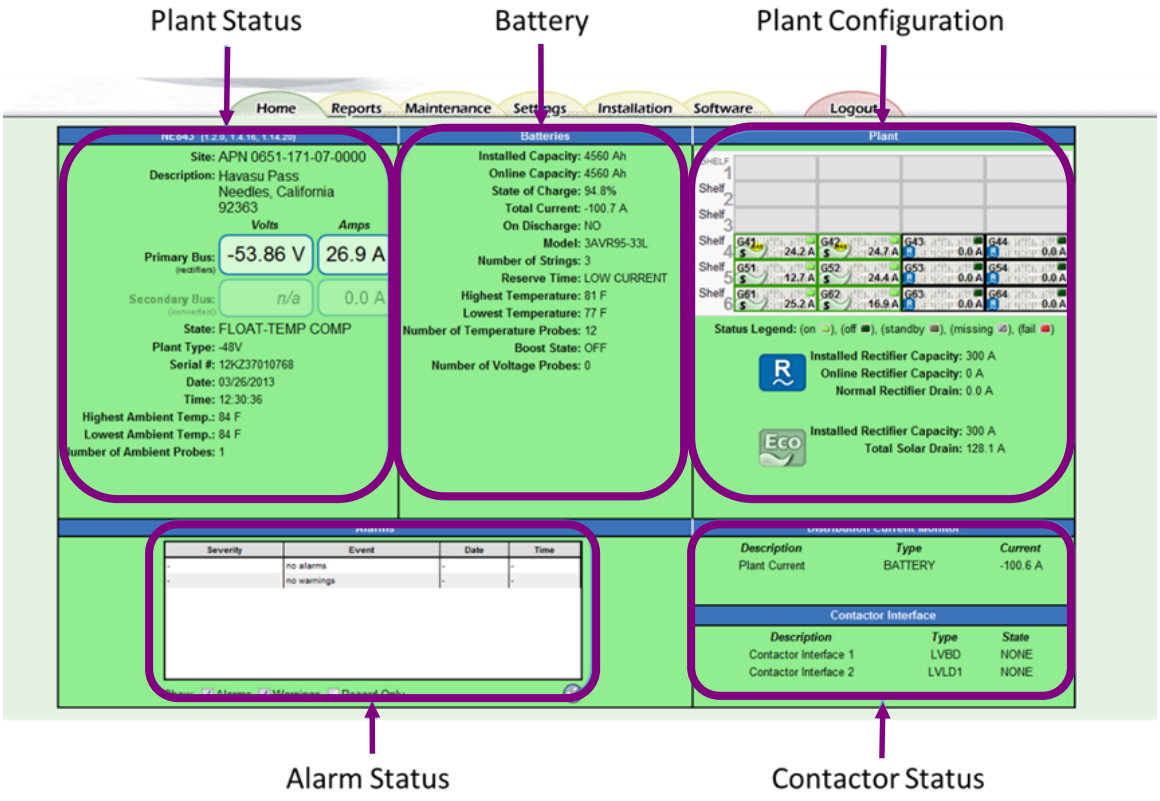
Once the LAN port is configured as a server, the laptop can be connected to the LAN port, using a standard ethernet cable. Use a standard web browser to access the controller web pages at default IP address: 192.168.2.1

Warning: Do not connect LAN port to a network when set to Server mode. Set the controller LAN port to Client or Static before connecting to the network. Static is the factory default setting and the typical setting for most networks.

Once connected to the controller web server a log on screen should be visible:

Logon Screen - web view

Factory Default password is “Administrator” and should be used for initial logon. It is highly recommended that one of the first activities should be to change the default password(s).



Home Page – Web View

© 2025 OmniOn Power Inc. All rights reserved.

Pulsar Plus Controller (continued)

Information: Controller Basic Operation (Pulsar Plus)

View and change system parameters from the factory defaults via

A) Controller Display

B) Craft Port on front of controller using a laptop with EasyView2 software or HyperTerminal. EasyView2 (GUI) software can be downloaded from **omnionpower.com**

C) J5 LAN port web pages using a laptop with browser. LAN port Server mode is for local laptop connection. Set the LAN port to Server: With the controller set to Server enter the default IP address 192.168.2.1 (default) in the web browser address field.

Warning: Do not connect J5 LAN port to a network when set to Server. Set the controller to Client or Static before connecting to the network. Static is the factory default setting and the typical setting for most networks.

Controller Alarm Status: The display changes colors; Green = Normal, Amber = Minor Alarm, Red = Critical/Major Alarm

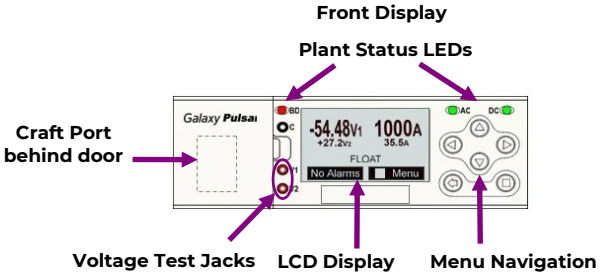
Some alarms may occur during initial installation; example: thermal probe fail or Major/Minor communication fail.

Clear these alarms: Via Controller Display: follow the menu path; Menu > Control/Operation > Clear Events or Uninstall Equipment.
Via web pages or EasyView2; Select the Maintenance tab > Clear latched events and clear missing devices.

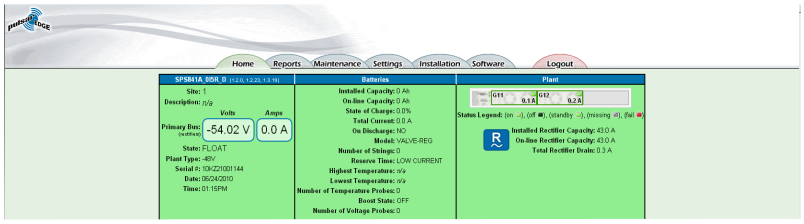
Verify Basic Installation Settings: Date, Time, Battery Type, number of strings and float voltage

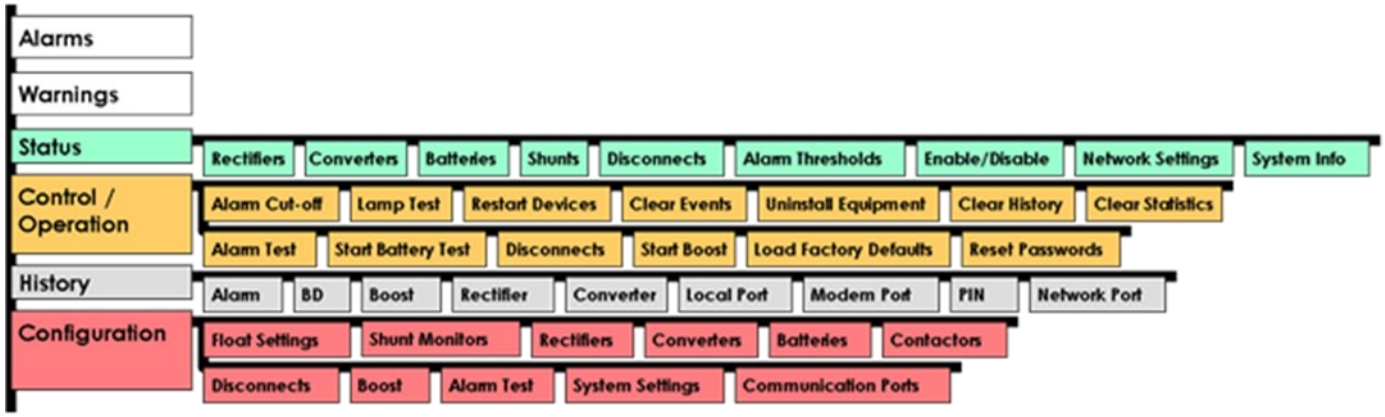
Controller Display: Menu > Configuration > System Settings and Menu > Configuration > Batteries.

Web pages or EasyView2: Installation Tab for Date, Time. Site ID and Site Description.
Settings Tab > Battery Management for Battery Type and number of battery strings installed.



Web Home Page





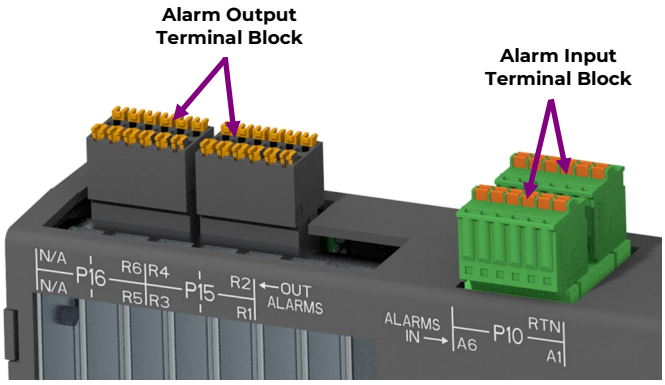
Front Panel Menu Structure - Overview

© 2025 OmniOn Power Inc. All rights reserved.

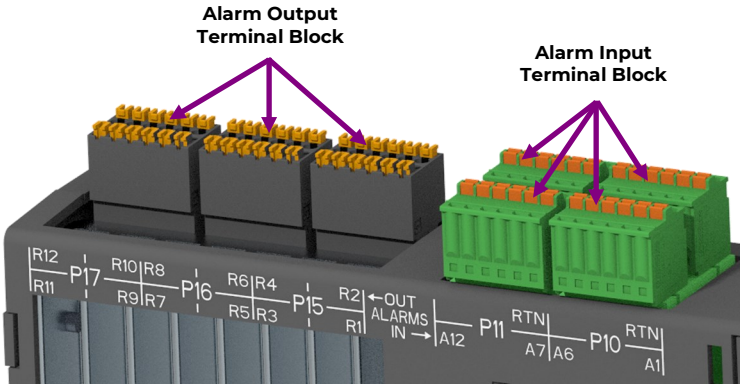
Information: Controller Connections (Pulsar 200)

Alarm Inputs and Outputs

The Pulsar 200 provides both input and output alarms via pluggable terminal blocks as shown in the views below.



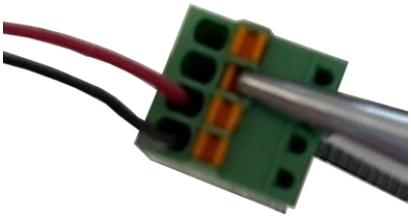
P1x Module



P2A Module

To insert wires into terminal blocks:

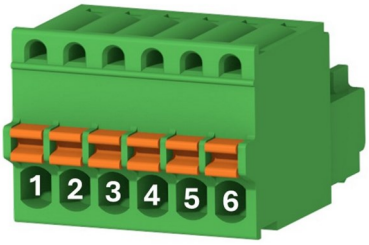
1. Depress orange tab to open internal clamps
2. Insert wire
3. Release orange tab so it springs back out
4. Gently tug on wire to make sure it is secured



Note: Wire size and strip length are provided in the following sections

Alarm Inputs

The P1x peripheral modules provide 6 alarm inputs via P10 connector. The P2A module provides 12 alarm inputs via P10 and P11 connectors. Default alarm descriptions may be changed as needed using web pages or front panel display.



Alarm Inputs Terminal Block

Conductor Size: 26-20 AWG

Stripping Length: 8mm

Standard Pulsar 200 Controller Alarm Input Defaults

Module	Conn.	Pin	Description	Conn.	Pin	Description
P1x, P2A	P10 (top)	1	Fuse Alarm Major (48V)	P10 (bot)	1	N/A
		2	Open String		2	N/A
		3	Fuse Alarm Major (24V, 12V, 58V)		3	N/A
		4	Generic Alarm for Auxiliary Major		4	N/A
		5	Emergency Power Off		5	Emergency Power Off Return
		6	Door Open		6	Door Open Return
P2A	P11 (top)	1	Air conditioner Fail	P11 (bot)	1	Air conditioner Fail Return
		2	Battery Test/GSTR		2	Battery Test/GSTR Return
		3	High external Temperature		3	High external Temperature Return
		4	Low external Temperature		4	Low external Temperature Return
		5	Hydrogen		5	Hydrogen Return
		6	Generator Fail		6	Generator Fail Return

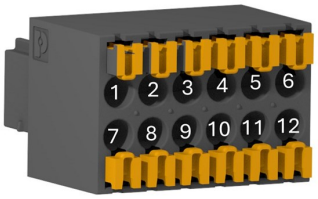
© 2025 OmniOn Power Inc. All rights reserved.

Pulsar 200 Controller (continued)

Information: Controller Connections (Pulsar 200)

Alarm Outputs

The P1x peripheral modules provide 6 alarm relays via P15 and P16 connectors. The P2A module provides 12 alarm relays via P15, P16, and P17 connectors. Alarm relays are full Form C relays and can be wired as NO or NC. Default alarm descriptions may be changed as needed using web pages or front panel display.



Alarm Outputs Terminal Block

Conductor Size: 26-20 AWG

Stripping Length: 7mm

Module	Conn.	Relay	Pin	Description
P1x, P2A	P15	1	1	Power Critical (NC)
			2	Power Critical (C)
			3	Power Critical (NO)
		2	7	Power Major (NC)
			8	Power Major (C)
			9	Power Major (NO)
		3	4	Power Minor (NC)
			5	Power Minor (C)
			6	Power Minor (NO)
		4	10	Battery on Discharge (NC)
			11	Battery on Discharge (C)
			12	Battery on Discharge (NO)
P1x, P2A	P16	5	1	Rectifier Failure (NC)
			2	Rectifier Failure (C)
			3	Rectifier Failure (NO)
		6	7	Fuse Alarm Major (NC)
			8	Fuse Alarm Major (C)
			9	Fuse Alarm Major (NO)
P2A	P16	7	4	Very Low Voltage (NC)
			5	Very Low Voltage (C)
			6	Very Low Voltage (NO)
		8	10	AC Fail (NC)
			11	AC Fail (C)
			12	AC Fail (NO)
P2A	P17	9	1	High Voltage (NC)
			2	High Voltage (C)
			3	High Voltage (NO)
		10	7	Multiple Rectifier Fail (NC)
			8	Multiple Rectifier Fail (C)
			9	Multiple Rectifier Fail (NO)
		11	4	tbd (NC)
			5	tbd (C)
			6	tbd (NO)
		12	10	tbd (NC)
			11	tbd (C)
			12	tbd (NO)

© 2025 OmniOn Power Inc. All rights reserved.

Pulsar 200 Controller (continued)

Information: Controller Basic Operation (Pulsar 200)

View and change system parameters from the factory defaults via

A) Controller Display

B) Front panel ethernet craft port using a laptop with standard browser. This port is in Server mode and is dedicated to local laptop connection.

Warning: Do not connect the front ethernet craft port to a network

Controller Alarm Status: The status light bar changes colors; Green = Normal, Amber = Minor Alarm, Red = Critical/ Major Alarm

Some alarms may occur during initial installation; eg: thermal probe fail or Major/Minor communication fail.

Clear these alarms: Via Controller Display: follow the menu path:

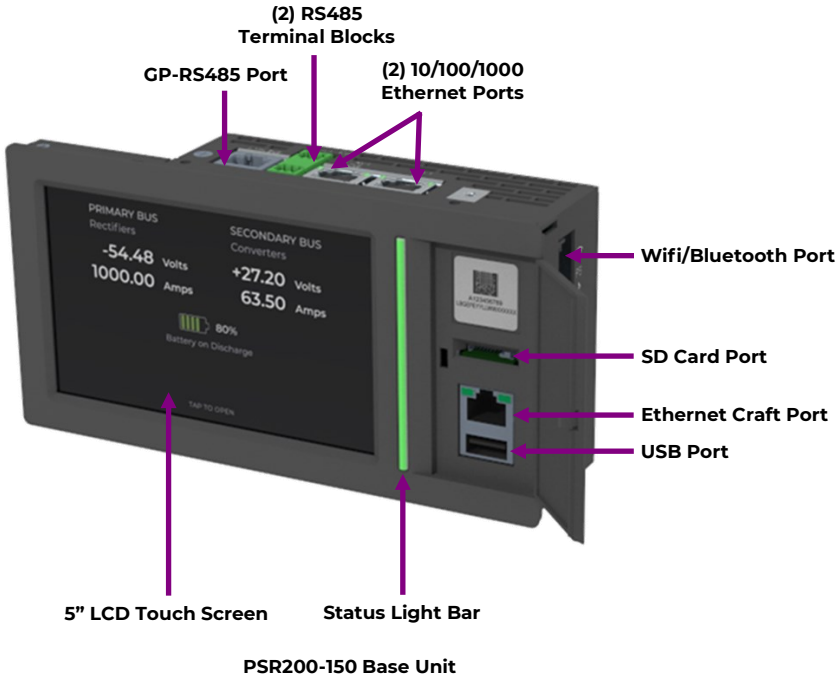
Maintenance > Equipments > Clear Missing Devices or Uninstall Equipment.

Verify Basic Installation Settings: Date, Time, Battery Type, number of strings and float voltage

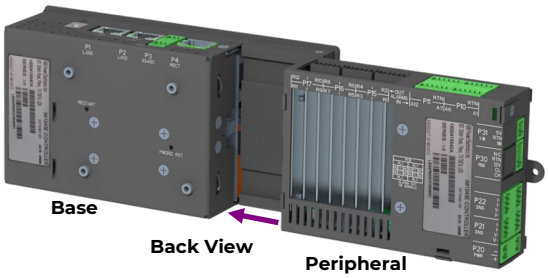
Settings > Basic Settings > Date/Time and Timezone (or set NTP server IP Address for auto date/time)

Settings > System > Battery

Settings > System > Float Settings



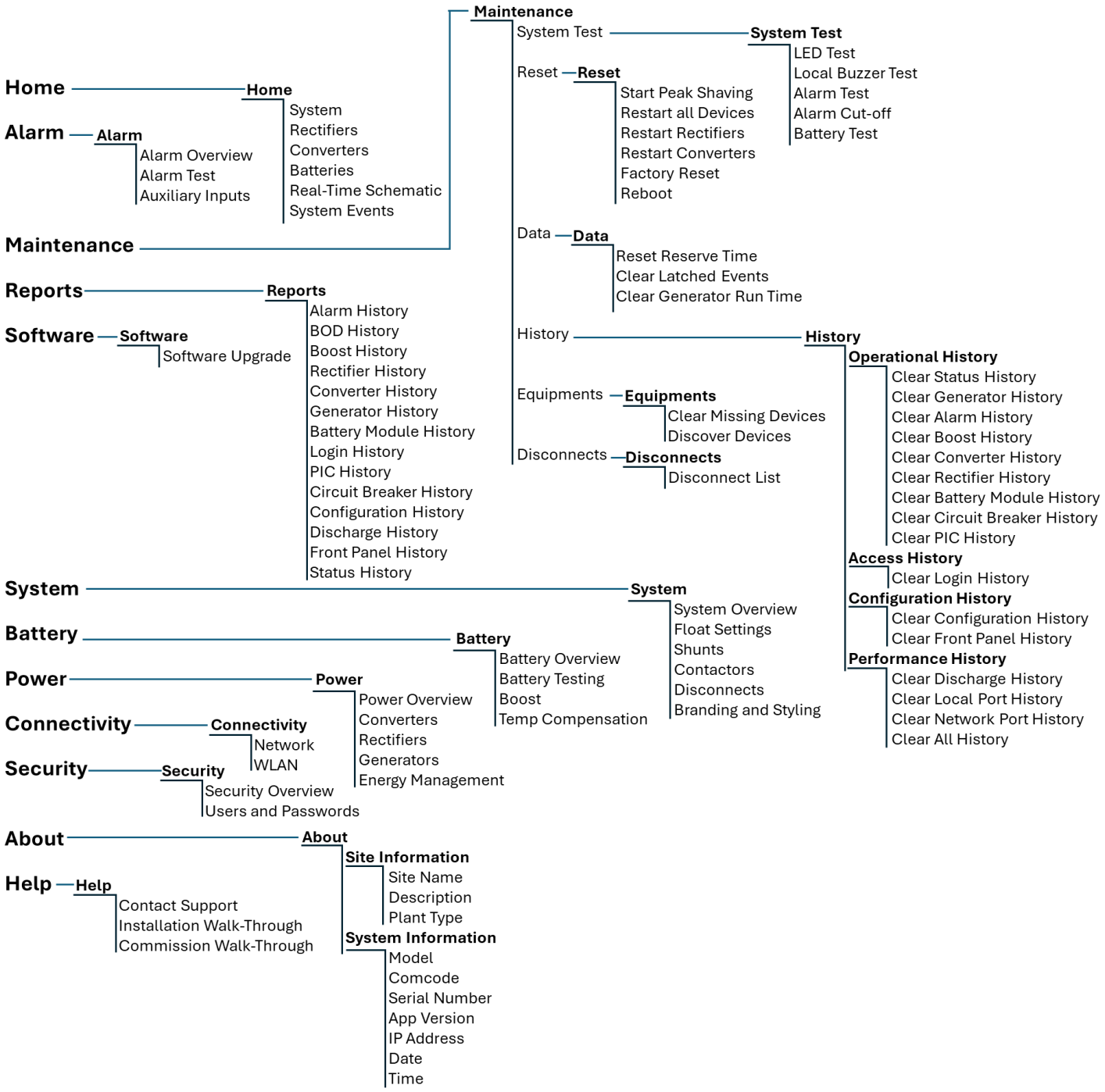
PSR200-150 Base Unit



© 2025 OmniOn Power Inc. All rights reserved.

Pulsar 200 Controller (continued)

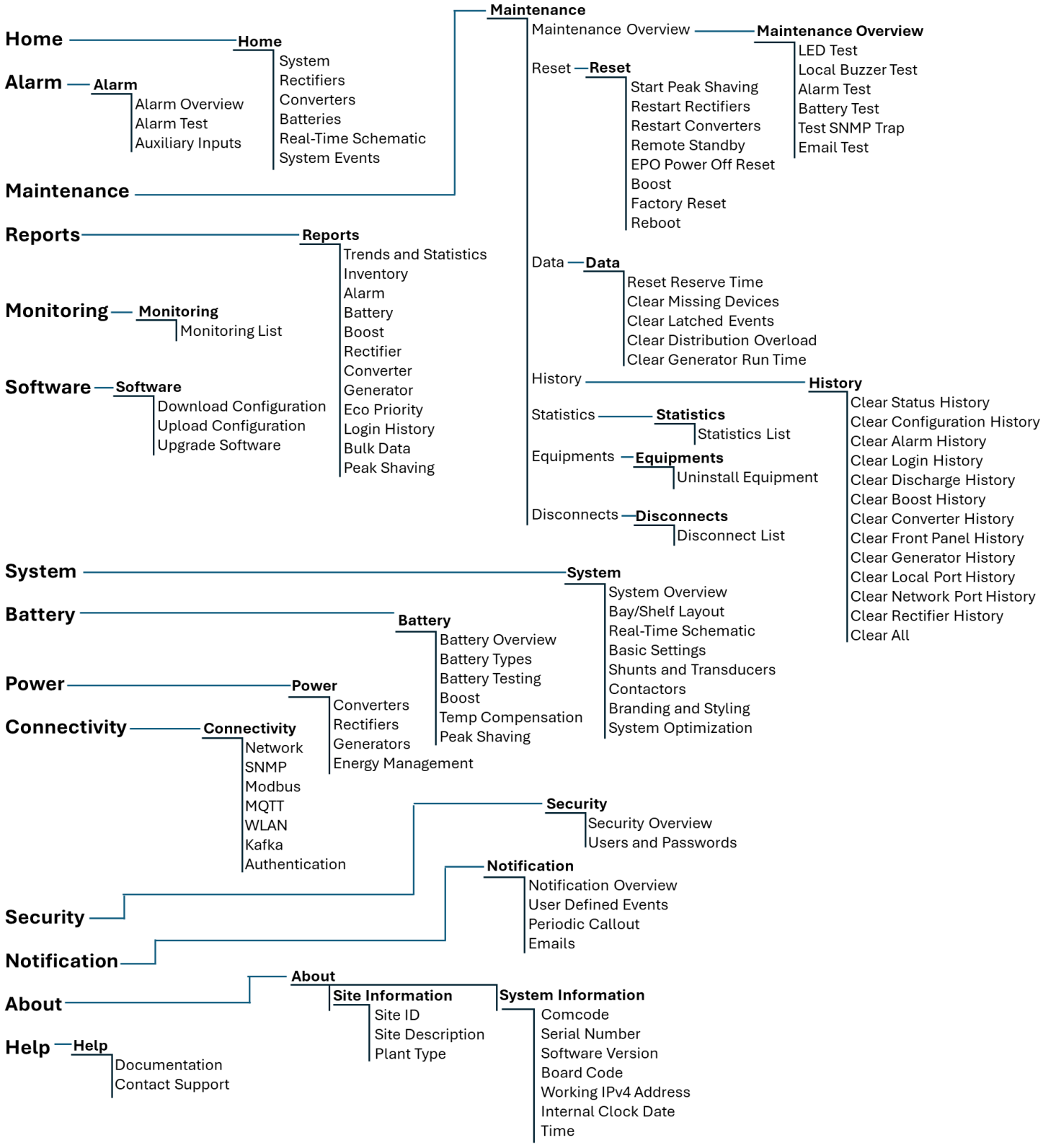
The front panel menu structure for navigation is shown below.



© 2025 OmniOn Power Inc. All rights reserved.

Pulsar 200 Controller (continued)

The web page menu structure for navigation is shown below.



© 2025 OmniOn Power Inc. All rights reserved.

Pulsar 200 Controller (continued)

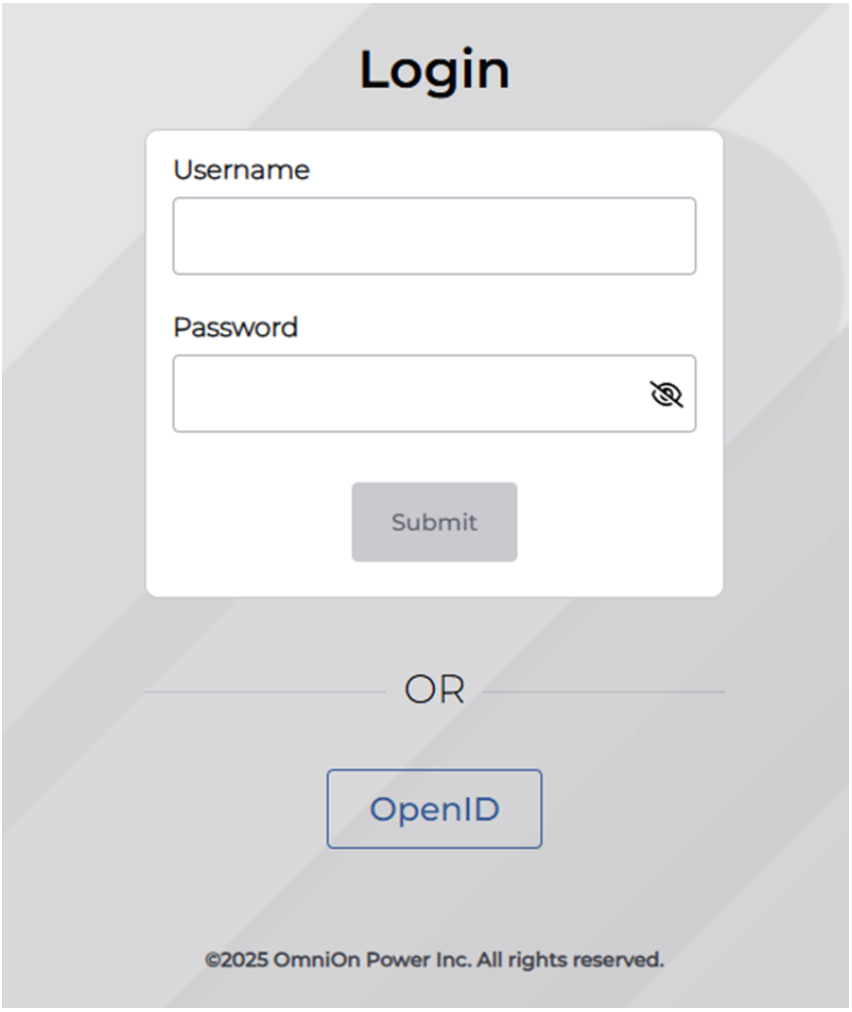
Information: Controller Basic Operation (Pulsar 200)

All user configurable parameters can be accessed from the front panel, however user convenience and visibility is enhanced by access through the front ethernet craft port using the built-in web pages.

This port is configured as a server, so a laptop can be connected using a standard ethernet cable. Use a standard web browser to access the controller web pages at default IP address: 192.168.1.1

Warning: Do not connect this port to a network.

Once connected to the controller web server a log on screen should be visible:



Logon Screen - web view

Use the factory default credentials for initial logon.

Username: admin

Password: Omnion1234

It is highly recommended that one of the first activities should be to change the default password(s).

© 2025 OmniOn Power Inc. All rights reserved.

Pulsar 200 Controller (continued)

The following Screen is an example of a Rectifier only system that has no Secondary DC/DC converters.

Home Screen

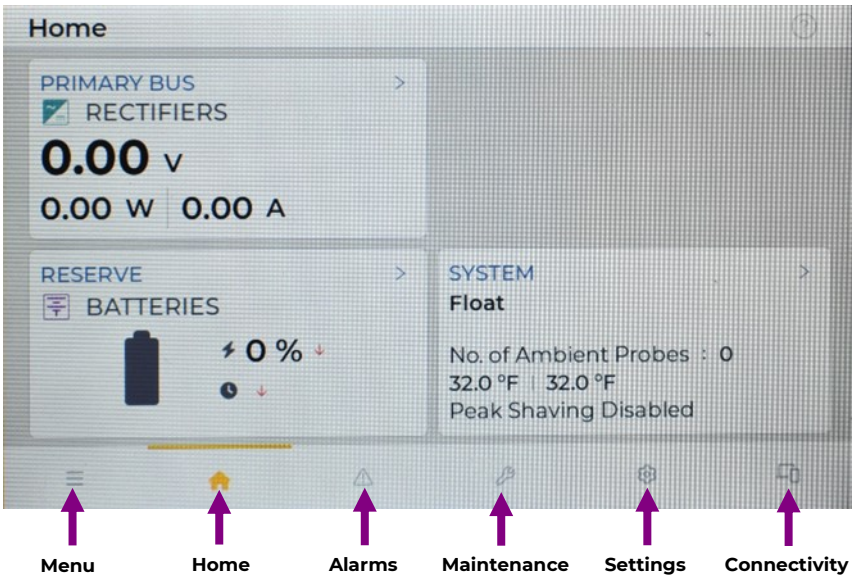
Displays:

Primary Bus: Voltage, Power, Current

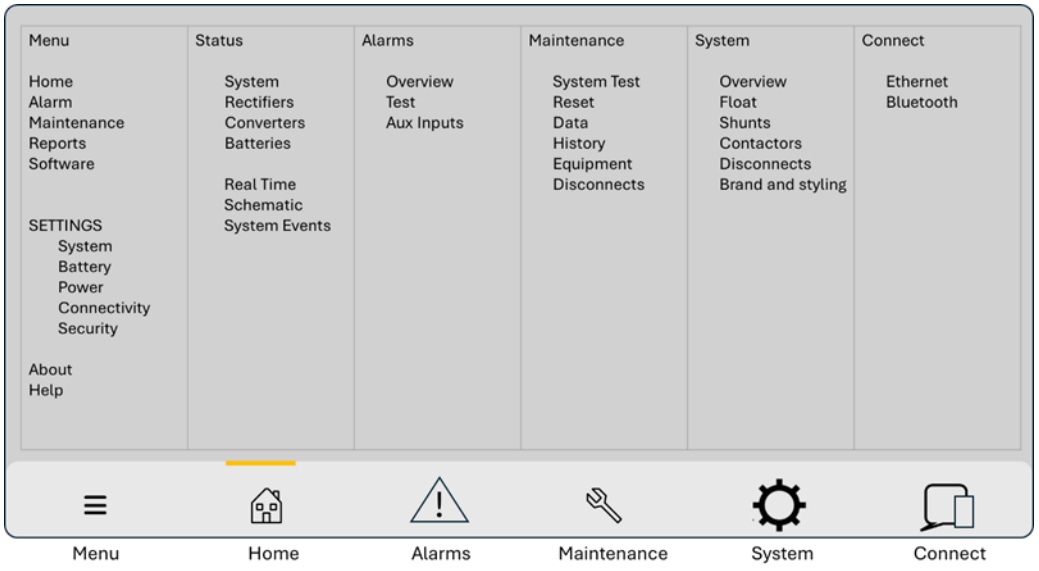
Secondary Bus (if present): Voltage, Power, Current

Battery: State of Charge

System: Operating Modes, Temp. Probes, Temperature(s)



Function bar operations:



© 2025 OmniOn Power Inc. All rights reserved.

Specifications and Application

- Specifications and ordering information are in the Infinity S Ordering Guide available at **omnionpower.com**
- External Surge Protective Device (SPD) is required on all AC inputs.
- Equipment and subassembly ports:
    1. are suitable for connection to intra-building or unexposed wiring or cabling.
    2. can be connected to shielded intra-building cabling grounded at both ends.
- Grounding / Bonding Network – Connect to an Isolated Ground Plane (Isolated Bonding Network) or an Integrated Ground Plane (Mesh-Bonding Network or Common Bonding Network). Failure to properly bond the power plant to ground may void the warranty in the event of excessive fault or surge current.
- Installation Environment - Install in Network Telecommunication Facilities, OSP, or where NEC applies.
- Battery return may be either Isolated DC return (DC-I) or Common DC return (DC-C).

Reference Documents

These documents are available at **omnionpower.com**

Document	Title
CPB-NES	Infinity S Power System Brochure
CC848815325	Infinity NEM Install Guide
CC848815341	Galaxy Pulsar Plus Product Manual
<tbd>	Galaxy Pulsar 200 Product Manual

Safety Statements

- Do not install this equipment over combustible surfaces.
- Rules and Regulations - Follow all national and local rules and regulations when making field connections.
- Compression Connectors
    - U. S. or Canada installations - use Listed/Certified compression connectors to terminate Listed/ Certified field-wire conductors.
    - All installations - apply the appropriate connector to the correct size conductor as specified by the connector manufacturer, using only the connector manufacturer's recommended or approved tooling for that connector.
- Electrical Connection Securing: Torque to the values specified on labels or in the product documentation.
- Cable Dress - dress to avoid damage to the conductors and undue stress on the connectors.
- Circuit Breakers and Fuses
    - Use only those specified in the equipment ordering guide.
    - Size as required by the National Electric Code (NEC) and/or local codes.
      Safety Tested Limits - Refer to the equipment ratings to assure current does not exceed:
      Continuous Load (List 1) - 60% of protector rating
      Maximum Load (List 2 - typically end of discharge) - 80% of protector rating.
    - GMT Style Fuses - Use only fuses provided with safety caps.
- Field-wired Conductors - Follow all National Electric Code (NEC) and local rules and regulations.
    - Insulation rating: 90°C minimum; 105°C (minimum) if internal to enclosed equipment cabinets.
    - Size AC field-wired conductors with 75°C ampacity (NEC) equal to or greater than their panel board circuit breaker rating.
- AC and DC input disconnect/protection - Provide accessible devices to remove input power in an emergency.
- Alarm Signals - Provide external current limiting protection. Rating 60V, 0.5A unless otherwise noted.
- Grounding - Connect the equipment chassis directly to ground. In enclosed equipment cabinets connect to the cabinet AC service ground bus. In huts, vaults, and central offices connect to the system bonding network.

© 2025 OmniOn Power Inc. All rights reserved.

Déclarations de sécurité

- N'installez pas cet équipement sur des surfaces combustibles.
- Règles et réglementations - Suivez toutes les règles et réglementations nationales et locales lors des connexions sur le terrain.
- Connecteurs à compression
    - Installations aux États-Unis ou au Canada - utilisez des connecteurs de compression homologués/certifiés pour terminer Conducteurs de fils de terrain certifiés.
    - Toutes les installations - appliquez le connecteur approprié au conducteur de taille correcte tel que spécifié par le fabricant de connecteurs, en utilisant uniquement l'outillage recommandé ou approuvé par le fabricant de connecteurs pour ce connecteur.
- Fixation de la connexion électrique : Serrez aux valeurs spécifiées sur les étiquettes ou dans la documentation du produit.
- Habillage de câble - Habillez-vous pour éviter d'endommager les conducteurs et une contrainte excessive sur les connecteurs.
- Disjoncteurs et fusibles
    - Utilisez uniquement ceux spécifiés dans le guide de commande de l'équipement.
    - Taille requise par le National Electric Code (NEC) et/ou les codes locaux.

      Limites de sécurité testées - Reportez-vous aux valeurs nominales de l'équipement pour vous assurer que le courant ne dépasse pas:

      Charge continue (Liste 1) - 60% de la cote de protection

      Charge maximale (Liste 2 - généralement en fin de décharge) - 80% de la valeur nominale du protecteur.
- Fusibles de style GMT - Utilisez uniquement des fusibles fournis avec des capuchons de sécurité.
- Conducteurs câblés sur le terrain - Suivez tous les codes électriques nationaux (NEC) et les règles et réglementations locales.
    - Indice d'isolation : 90°C minimum; 105°C (minimum) si à l'intérieur des armoires d'équipement fermées.
    - Dimensionnez les conducteurs CA câblés sur place avec un courant admissible de 75°C (NEC) égal ou supérieur à la valeur nominale du disjoncteur du panneau de distribution.
- Déconnexion/protection des entrées CA et CC - Fournir des dispositifs accessibles pour couper l'alimentation d'entrée en cas d'urgence.
- Signaux d'alarme - Fournit une protection de limitation de courant externe. Note 60V, 0.5A sauf indication contraire.
- Mise à la terre - Connectez le châssis de l'équipement directement à la terre. Dans les armoires d'équipement fermées, connectez-vous au bus de terre de service CA de l'armoire. Dans les huttes, les chambres fortes et les bureaux centraux, connectez-vous au réseau de liaison du système.

© 2025 OmniOn Power Inc. All rights reserved.

Precautions

- Install, service, and operate equipment only by professional, skilled and qualified personnel who have the necessary knowledge and practical experience with electrical equipment and who understand the hazards that can arise when working on this type of equipment.
- Disconnect batteries from outputs and/or follow safety procedures while working on equipment. Batteries may be connected in parallel with the output of the rectifiers. Turning off the rectifiers will not necessarily remove power from the bus.
- Do not disconnect permanent bonding connections unless all power inputs are disconnected.
- Verify that equipment is properly safety earth grounded before connecting power. High leakage currents may be possible.
- Exercise care and follow all safety warnings and practices when servicing this equipment. Hazardous energy and voltages are present in the unit and on the interface cables that can shock or cause serious injury. When equipped with ringer modules, hazardous voltages will be present on the ringer output connectors.
- Use the following precautions in addition to proper job training and safety procedures:
  - Use only properly insulated tools.
  - Remove all metallic objects (key chains, glasses, rings, watches, or other jewelry).
  - Follow Lock Out Tag Out (LOTO) procedures: customer specified, site specific, or general as appropriate. Disconnect all power input before servicing the equipment. Check for multiple power inputs.
  - Wear safety glasses.
  - Follow Personal Protective Equipment requirements: customer specified, site specific, or general as appropriate.
  - Test circuits before touching.
  - Be aware of potential hazards before servicing equipment.
  - Identify exposed hazardous electrical potentials on connectors, wiring, etc.
  - Avoid contacting circuits when removing or replacing covers;.
  - Use a personal ESD strap when accessing or removing electronic components.
- Personnel with electronic medical devices need to be aware that proximity to DC power and distribution systems, including batteries and cables, typically found in telecommunications utility rooms, can affect medical electronic devices, such as pacemakers. Effects decrease with distance.

© 2025 OmniOn Power Inc. All rights reserved.

Précautions

- Installer, mettre en service et utiliser l'équipement uniquement par du personnel professionnel, compétent et qualifié possédant les connaissances et l'expérience pratique nécessaires en matière d'équipement électrique et qui comprennent les dangers qui peuvent survenir lors de l'utilisation de ce type de Équipement.
- Débranchez les piles des sorties et/ou suivez les procédures de sécurité tout en travaillant sur l'équipement. Les batteries peuvent être connectées parallèlement à la sortie des redresseurs. Éteindre les redresseurs n'enlèva pas forcément l'alimentation du bus.
- Ne débranchez pas les raccords de liaison permanents à moins que toutes les entrées d'alimentation ne soient déconnectées.
- Vérifiez que l'équipement est correctement mis à la terre avant de brancher l'appareil. Des courants de fuite élevés peuvent être possibles.
- Exercez des soins et respectez tous les avertissements et pratiques de sécurité lors de l'entretien de cet équipement. L'énergie et les tensions dangereuses sont présentes dans l'unité et sur les câbles d'interface qui peuvent choquer ou causer des blessures graves. Lorsqu'il est équipé de modules de sonnerie, des tensions dangereuses seront présentes sur les connecteurs de sortie de la sonnerie.
- Utiliser les précautions suivantes en plus des procédures appropriées de formation et de sécurité d'emploi:
    - n'utiliser que des outils correctement isolés.
    - Enlevez tous les objets métalliques (porte-clés, lunettes, bagues, montres ou autres bijoux).
    - suivez les procédures de lock out tag out (LOTO): client spécifié, spécifique au site ou général selon le cas. Débranchez toutes les entrées d'alimentation avant d'entretenir l'équipement. Vérifiez l'alimentation de plusieurs entrées.
    - Portez des lunettes de sécurité.
    - respectez les exigences relatives aux équipements de protection individuelle: client spécifié, spécifique au site ou général selon le cas.
    - tester les circuits avant de les toucher.
    - être conscient des dangers potentiels avant d'entretenir l'équipement.
    - identifier les potentiels électriques dangereux exposés sur les connecteurs, le câblage, etc.
    - Évitez de contacter les circuits lors du démontage ou du remplacement des couvercles.
    - utilisez une sangle ESD personnelle lors de l'accès ou de la suppression de composants électroniques.
- Le personnel équipé de dispositifs médicaux électroniques doit être conscient que la proximité des systèmes de distribution et d'alimentation en courant continu, y compris les piles et les câbles, généralement dans les salles de télécommunication, peut affecter les appareils électroniques médicaux, tels que les stimulateurs cardiaques. Les effets diminuent avec la distance.

© 2025 OmniOn Power Inc. All rights reserved.

Change History (excludes grammar & clarifications)

Revision	Date	Description of the change
1.0	02/27/2023	Initial release
2.0	02/28/2023	-48V/-58V System added
3.0	06/30/2023	Updated product description on page no. 1, Added current ratings of AC6 and AC7 TB on page no. 2
3.1	11/28/2023	Updated as per OmniOn template
3.2	03/11/2025	Add Pulsar 200 information and update information flow in document

© 2025 OmniOn Power Inc. All rights reserved.

OmniOn Power Inc.
601 Shiloh Rd.
Plano, TX USA

omnionpower.com

We reserve the right to make technical changes or modify the contents of this document without prior notice. OmniOn Power™ does not accept any responsibility for errors or lack of information in this document and makes no warranty with respect to and assumes no liability as a result of any use of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of OmniOn Power™. This document does not convey license to any patent or any intellectual property right. Copyright© 2025 OmniOn Power Inc. All rights reserved.

© 2025 OmniOn Power Inc. All rights reserved.