



# CPS6000 Power System

Models: CC109161163 23" Shelf, Rear AC input terminals, 5 power slots, Rear bulk output  
CC109171575 Dual Shelf Kit



This CPS6000 power system is a 23" shelf equipped with a Pulsar Edge Controller.

**Single shelf system** Start with Step 1 on this page.

**Two shelf system** Start with Step A1 of the Two Shelf System Addendum on page 5.

### Tools required:

Wire cutters and strippers

Torque wrench - 0-65 in-lb (0-10Nm)

Screwdrivers - Philips #1 and #2, Flat small

Cable crimpers

Sockets - 5/16", 7/16", etc.

### Step 1 - Mount Shelf

Attach shelf to the frame using a minimum of four screws (two on each side) - 12-24 (provided).  
Torque to 35 in-lb (4Nm) - 5/16" socket.

### Step 2 - Connect AC Inputs

This shelf is equipped with rear access terminal blocks and knockouts on the side and top for conduit fittings.

The AC feeds may be 110Vac or 208/220Vac, depending on the type of rectifier used.

Each rectifier can be fed from an individual circuit or one feed can power two or three rectifiers.

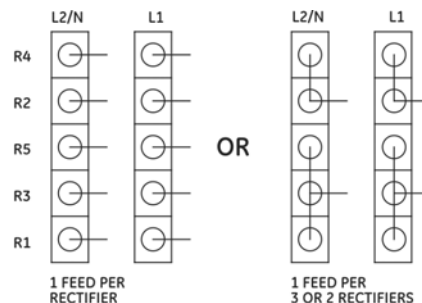
Connect the appropriate size ac wiring to the AC terminal blocks.

**Caution:** Ensure ac power is OFF and use appropriate lock-out tag-out procedures before continuing with ac connections.

**Caution:** When connecting to utility source, ensure all local and national wiring rules are being complied with.

**Caution:** When routing AC cables ensure cable does not come in contact with sharp or rough surfaces that may damage insulation and cause a short circuit. Make sure cable does not come in contact with any pinch points such as doors.

<p>Use a pair of needle nose pliers to remove the divider between the individual rectifier feeds when sharing inputs.</p>	<p>Snap Loose Plastic Divider With Pliers</p>	<p>Install a strap between the terminal blocks. Secure the strap in position with screws and torque to 10 inch lbs. Straps and screws are provided.</p>	
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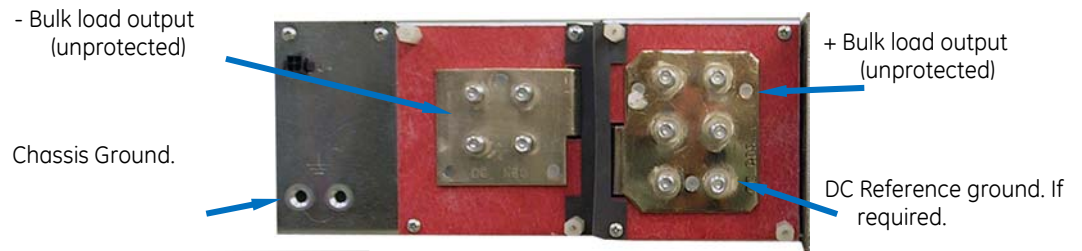
### Step 3 - Connect Chassis and DC Reference (CO) Grounds

Connections are on the rear.

- Lug Landing: #10 on 5/8-inch center (lugs not provided)
- 10 AWG recommended

1. Connect Chassis Ground - Torque to 30 in-lb (4 Nm)
2. Connect DC Reference Ground - Torque to 30 in-lb (4 Nm)

Note: Some applications may rely on frame mounting screws for chassis ground omitting the shelf ground cable.



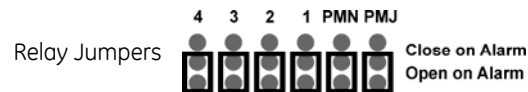
### Step 4 - Connect DC Output

Connections are on the rear. The shelf provides unprotected bulk output to an external distribution panel.

- Lug Landing: #10 on 5/8-inch center (lugs not provided)
1. Connect +Bulk and -Bulk cables - Torque to 30 in-lb (4 Nm)

### Step 5 - Set Jumpers - LAN Port and Relay per Galaxy Pulsar Edge Controller Quick Start Guide

1. Set Jumpers - LAN Port and Relay



### Step 6 - Install Controller per Galaxy Pulsar Edge Controller Quick Start Guide

### Step 7 - Install Signal and Communications Cables

Connectors are on front.

See *Information: Alarm Connections ...* for Details

1. J1 Alarms and Inputs - Connect to office alarms and signals.
2. J5 LAN - Connect to Ethernet network.

### Step 8 - Install 1-Wire Battery Temp and Voltage Monitor per Galaxy Pulsar Edge Controller Quick Start Guide - Optional (not available in two shelf systems)

1. Connect 1-Wire Battery Temp and Voltage Monitor to J2

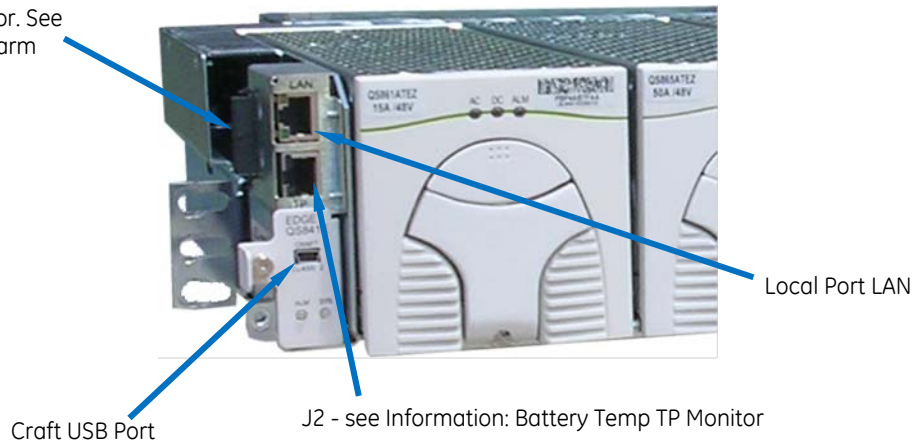
## Step 9 - Controller Connections

Connectors are on front.

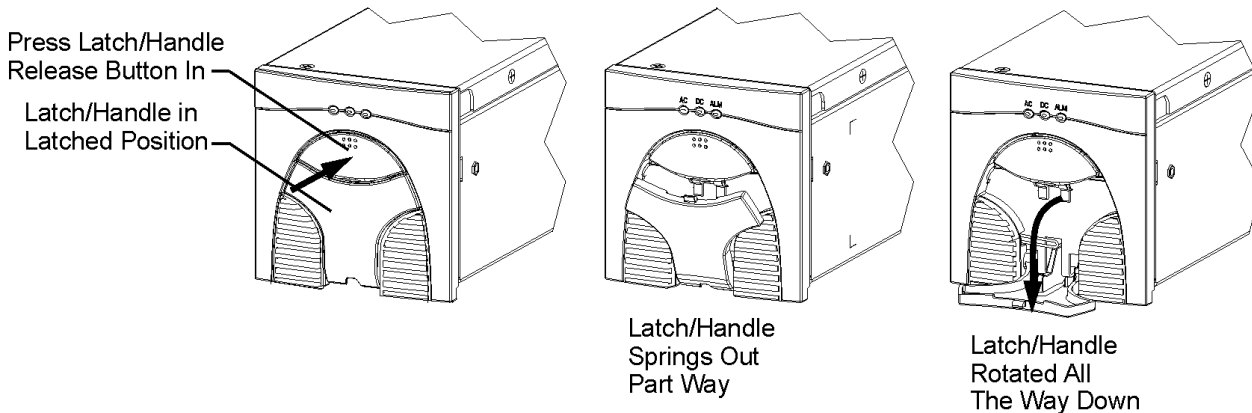
See *Information: Alarm Connections ...* for Details

1. J1 Alarms and Inputs - Connect to office alarms and signals.
2. J2 LAN - Connect to Ethernet network (.can also be used as a Craft Port when configured as a Server.)

Office alarm connector. See Information: Office Alarm Connections.



## Step 6 - Rectifier Installation



1. Unlatch the handle as shown above.
2. Firmly push the rectifier into the rectifier slot until the latch pops most of the way up.
3. Push the latch into the latched position.

NOTE: When installing a rectifier in a powered system the ALM LED on the rectifier will blink until communication with the controller is established.

## Step 7 - Initial Start Up

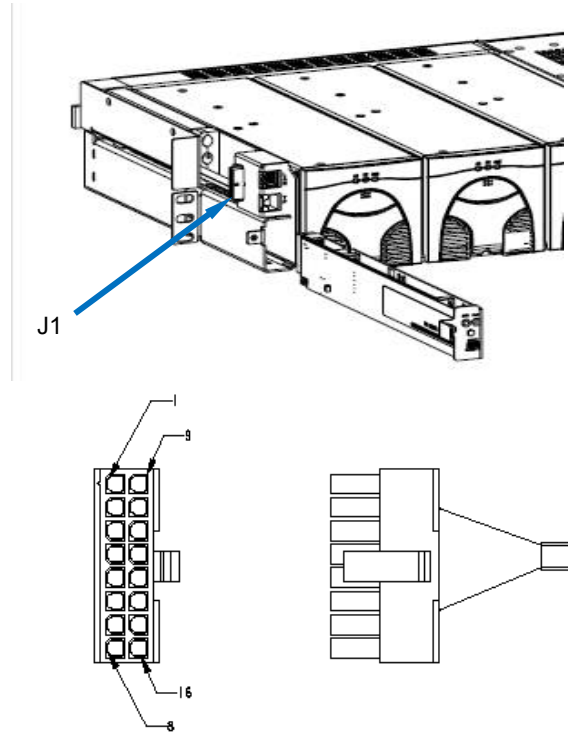
Verify that all AC, DC and Alarm connections are complete and secure. Turn on AC input breakers. If there are no alarms, make required adjustments to the default settings on the controller for this installation.



### Information: Alarm Connections

Office alarm connector (J1) is located on the left side of the shelf. It provides access to the alarm relay inputs and outputs. Note the wire color and alarm descriptions in the attached table

Pos	Color	Signal	Factory Default
1	BLK	User Configurable Alarm Input	Door Open
2	W	User Configurable Alarm Input	AMJ (Aux Major)
3	R/BLK	PTC Protected VBUS-/ABS	NA
4	OR	Power Major Relay Return	PMJ Return
5	OR/BLK	Power Minor Relay Return	PMN Return
6	R/WHT	Relay 1 Return	BOD/AC Fail Return
7	WHT/BLK	Relay 2 Return	ACF Return
8	BL/R	Relay 3 and Relay 4 Return	FAJ Return R3 & R4
9	R	User Configurable Alarm Input	SPD Fail
10	GR	User Configurable Alarm Input	Air Conditioner Fail
11	BL	Relay 4	<i>Unassigned</i>
12	GR/BK	Power Major Relay	PMJ (Power Major)
13	BL/BK	Power Minor Relay	PMN (Power Minor)
14	GR/WHT	Relay 1	BOD/AC Fail
15	WHT/R	Relay 2	ACF
16	OR/R	Relay 3	FAJ

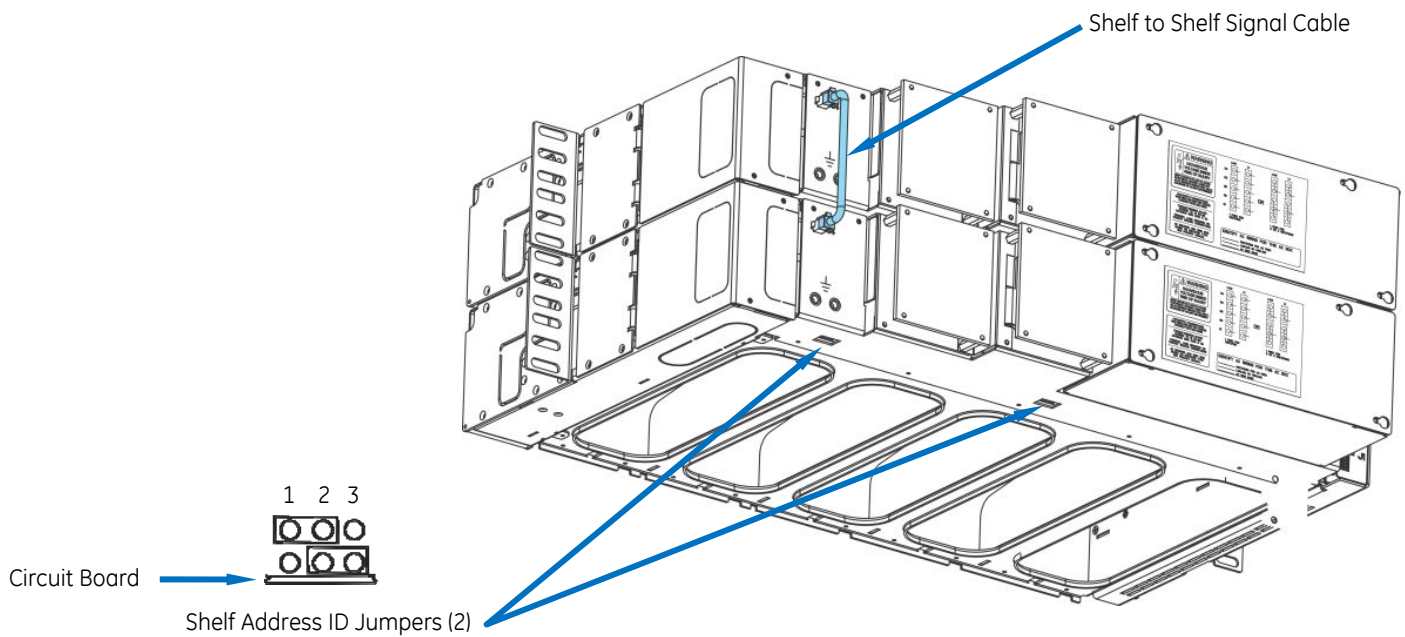


## Two Shelf System Addendum

Two shelf systems combine two identical shelves and install a controller into the top shelf.

Top Shelf Signal connections, Controller, Control Panel - Active

Bottom Shelf Signal connections not used, Controller not installed, Control Panel - Inactive (unpowered)



### Step A1 - Set Shelf Address Jumpers on Bottom Shelf

Set Shelf ID Jumpers (2) on bottom shelf as shown above.

### Step A2 - Mount Shelves per main Step 1

### Step A3 - Install Shelf to Shelf Signal Cable

Install cable between J2 on both shelves.

### Step A3 - Proceed with installation from main Step 2



## Specifications and Application

- Specifications and ordering information are in the *Slimline Power System Ordering Brochure* available at [www.gecriticalpower.com](http://www.gecriticalpower.com)
- External Surge Protective Device (SPD) is required on all AC inputs.  
Equipment Safety is Approved in IEC 60664-1 Installation Category II environments.
- 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).
- 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 [www.gecriticalpower.com](http://www.gecriticalpower.com).

Document	Title
108992120	CPS6000 Power Shelf Product Manual
850035894	Galaxy Pulsar Edge Quick Start Guide
CC848815341	Pulsar Edge Controller Family Product Manual
	CPS6000 Power System Brochure



## Notes



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