



PowerPak 9

Power Distribution Unit
with BakPak Integration



BakPak
Enabled

QUICK START GUIDE

Introduction

The Pakedge PowerPak 9 Power Distribution Unit gives you unprecedented convenience and control, including on/off sequencing to power on and shut down sensitive equipment in a configurable order. The PDU has full monitoring capabilities, including input voltage, frequency, individual outlet current, and temperature (sensor sold separately). The user-defined alerts can trigger actions based off of these measurements, sound an audible buzzer, and send notifications. With the integration of the PowerPak 9 in to the BakPak management system, all of these features are available remotely in an overall network view. The elegant OLED display enables per-outlet control and monitoring as well as network information to help with PowerPak setup.

Key features:

- Configurable power-up and shutdown: Configure the PowerPak to power on/off connected devices in any order for device-dependent dependent hardware and to protect sensitive equipment against power flooding.
- Secure network control: The PowerPak is fully IP addressable using the built-in, secure Web interface.
- Web-based monitoring: Monitor the realtime and historical current and power usage of each PDU outlet, along with the input voltage and frequency.
- Configurable alerts: Define visual, audible, and email alarms with full logging.
- Surge protection: Provides up to 6kV surge protection to your devices.
- Manageable by Pakedge's Bakpak network management agent from any location.

Package contents

- (1) PowerPak 9 Power Distribution Unit
- (1) Power cord
- (2) Rack-mount brackets and screws
- (1) Quick Start Guide
- (1) Ethernet cable
- (1) Console cable
- (4) Rubber feet

User Guide

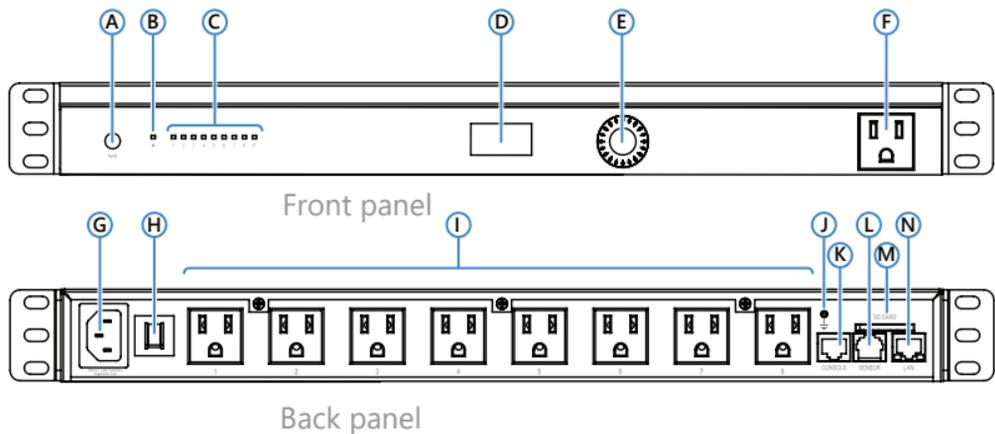
For more detailed instructions for this device and for the BakPak Management Agent, refer to the *PowerPak User Guide* (ctrl4.co/powerpak-ug).

Specifications

The nine-outlet power distribution unit is for use in North America.

- Input: 100-120VAC, 50~60 Hz
- Output: 100-120VAC, 12A, 50~60 Hz, 1440W (total)
- System requirements: Windows or Mac PC with an Ethernet interface

Overview



- A** Power button
- B** Surge protection indicator light
- C** Power outlets 1~8 and F indicator light
- D** OLED display
- E** Circular selector switch
- F** Power outlet F

- G** Power inlet
- H** Circuit breaker
- I** Power outlets 1~8
- J** Ground
- K** Console port
- L** RJ11 port (for temperature sensor)
- M** SD card slot
- N** Ethernet port for Internet connection

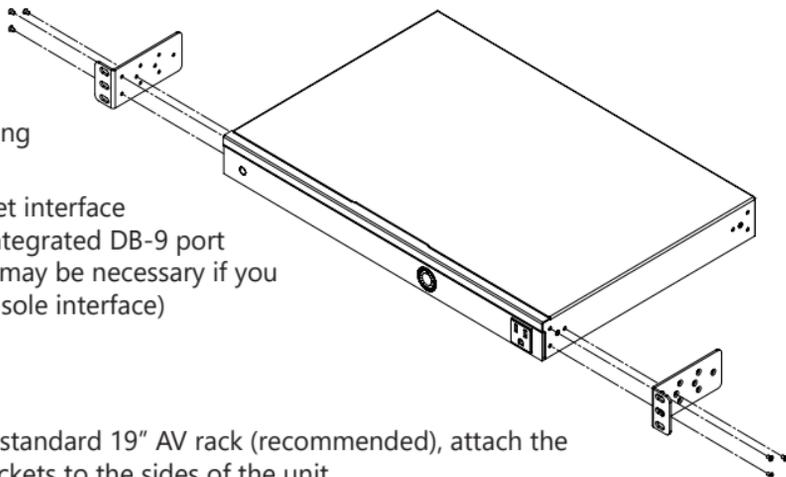
Installing

Tools required:

- Phillips screwdriver (if using rack-mount brackets).
- PC or laptop with Ethernet interface and a web browser (an integrated DB-9 port or USB-to-serial adapter may be necessary if you would like to use the console interface)
- Ethernet cable

To install the unit:

- 1 If mounting the unit in a standard 19" AV rack (recommended), attach the included rack-mount brackets to the sides of the unit.
- 2 If not rack mounting, make sure that the unit is physically mounted near power and network connections (for example, a backbone switch or firewall/router). The unit must also be connected to a reliable ground connection (see Step 3).
- 3 To ensure the unit is properly grounded and remains safe, connect a ground wire (12 gauge minimum) from the back of the PE-081's ground terminal to a reliable ground (such as metal on the rack or a floor ground lug).
- 4 Connect power to the device.
- 5 Connect an Ethernet cable from your computer to the **LAN** port on the PowerPak. You are now ready to configure the unit to an IP address that matches your network.



Warnings

Elevated Operating Ambient—If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.

Reduced Air Flow—Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

Mechanical Loading—Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading—Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Earthing—Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (for example, via the use of power strips).

Using the hardware controls

Task	Action	Result
Reset to factory defaults	Press and hold power button for 10 seconds.	Outlet LEDs blink during reset, but outlets remain enabled. User interface is reset to defaults.
Enter Sleep mode	Press and hold power button for two seconds.	Outlets turn off, based on user-defined power off delay times.
Wake from Sleep mode	Press and release power button.	Outlets turn on according to user-defined power-on delay times.
OLED menu options	Rotate scroll wheel and press center button	Toggles menu options and selects an action.

Using the OLED display

From the home screen, rotate the scroll wheel and press the center button to select from the following menu options:

- **Local Reboot:** Press and hold the center button for two seconds to power cycle the outlets that have this feature enabled
- **Measurements:** Display the voltage, current or power consumption for the entire PowerPak or individual outlets
- **Outlet control:** Turn the selected outlet on/off
- **Settings:** Show information about the PowerPak or adjust the display settings

Configuring the hardware

Step 1: Logging in

- 1 After power is connected and a computer is connected to the **LAN** port, enter the PowerPak's IP address into the address bar of your web browser. The login screen opens. (The IP address can be found in the *Settings* menu on the OLED display.)
Default settings: The IP address will be automatically assigned by a router if a DHCP server is detected. Otherwise, the default IP address will be automatically set to **192.168.1.210**.
- 2 Type your user name and password, then click **Login**. (The default username is **pakedge** and the password is **pakedgep**.)

Note: If your computer is not set to the default IP scheme (192.168.1.X) of the PowerPak, you must first configure the TCP/IP settings on your computer to log in to the unit through a web browser.

The following page will display when logged in:

The screenshot displays the PowerPak 9 web interface. At the top, the date is Fri 02/10/2017. The main header is split into two sections: "Outlet Configuration" and "Outlet Alerts", both featuring a warning icon. Below the header is a status bar with the following information:

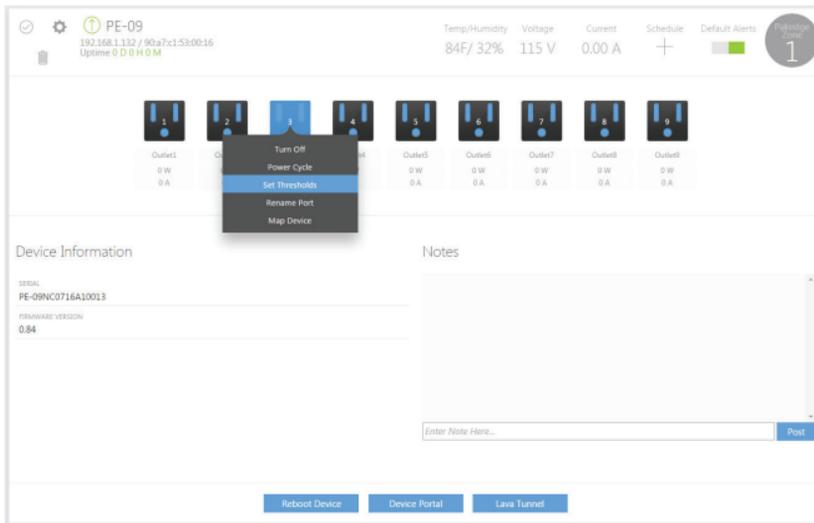
IP Address: 192.168.1.110	MAC Address: 90A7:C153:00:23	Uptime: 9 m 24 s	Voltage: 115 V	Frequency: 60 Hz	Total Current: 0.00 A	Temperature: 75 °C / 165 °F	Humidity: 51%
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The main content area contains three rows, each representing an outlet:

Outlet Name	Current	Power	Peak Current	Power On Delay	Power Off Delay	Power Cycle	Reset Peak
Outlet1	0.00 A	0 W	0.05 A	0	0		
Outlet2	0.00 A	0 W	0.02 A	0	0		
Outlet3	0.00 A	0 W	0.02 A	0	0		

Adding the PowerPak to a BakPak Cloud account

- 1 Make sure you have a installed a BakPak Management Agent and have an active mybakpak.com account.
- 2 Connect your PowerPak to the same network as the BakPak Management Agent.
- 3 Log in to your mybakpak.com account and run the device scan. You are able to view the PowerPak and manage it.



Troubleshooting

Symptom	Possible causes	Solution
PowerPak has no power.	<ul style="list-style-type: none"> PowerPak is not turned on. 	<ul style="list-style-type: none"> Press power button on front of the PowerPak. If the PowerPak is connected to wall outlet controlled by a light switch, make sure the light switch is on.
	<ul style="list-style-type: none"> An incompatible power supply is being used. 	<ul style="list-style-type: none"> Use the power supply that came with the PowerPak.
Connected device not receiving power.	<ul style="list-style-type: none"> The device is connected to an outlet that may be turned off via the UI configuration. 	<ul style="list-style-type: none"> Check status of the outlet from the UI Dashboard and click the outlet to turn it on if showing off. Verify the outlet is configured from the <i>Scheduling</i> page. Press the PowerPak's power button to make sure it is not in Sleep mode.
Not receiving email notifications for outlets.	<ul style="list-style-type: none"> 'Email Notification' check box from Auto Ping page is not selected. 	<ul style="list-style-type: none"> If using auto ping, navigate to the <i>Auto-Ping</i> page and select Email Notification, then enter your email credentials on the <i>Alerts</i> page.
	<ul style="list-style-type: none"> 'Email' check box is not selected from Alerts page. 	<ul style="list-style-type: none"> If using an Alerts configuration, navigate to the <i>Alerts</i> page and verify that Email has been selected and that email credentials have been entered.
When connecting power to the PowerPak, "Polarity" error message displayed on the OLED.	<ul style="list-style-type: none"> Inlet power cord has been plugged in with the reversed polarity. 	<ul style="list-style-type: none"> Connect the inlet power cord with the correct polarity by rotating the plug 180°. Polarity error message should no longer be displayed.
	<ul style="list-style-type: none"> Line and neutral polarities are reversed in the wall outlet. 	<ul style="list-style-type: none"> Contact an electrician to check the electrical wiring.

Technical Support

For technical help:
www.pakedge.com/portal
support@pakedge.com
(650) 385-8703

For non-technical inquires:
customerservice@pakedge.com
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For regulatory information:
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