

# PANDUIT PRODUCT SAFETY ADVISORY (PSA)

Date: September 18, 2018

Reference: PSA09182018001

## IMPORTANT SAFETY INFORMATION REGARDING PANDUIT UNINTERRUPTIBLE POWER SUPPLIES (UPS) AND NETWORK ZONE SYSTEMS WITH UNINTERRUPTIBLE POWER SUPPLIES



**WARNING: FAILURE TO FOLLOW THIS PRODUCT SAFETY ADVISORY AND UPDATE YOUR FIRMWARE IN ANY AFFECTED UPS OR NETWORK ZONE SYSTEM COULD RESULT IN INJURY TO PEOPLE AND EQUIPMENT, INCLUDING FIRE AND/OR SKIN AND EYE INJURY.**

**POTENTIAL FAILURE.** Under certain conditions, Panduit Uninterruptible Power Supplies (UPS) and Network Zone Systems with UPS contain capacitors that may fail, and vent or leak hazardous substances onto the outside of the UPS housing. When this occurs, the leaked substances may cause potential safety hazards and the UPS will eventually stop operating.

**POTENTIAL SAFETY HAZARDS.** The capacitor is an electronic product that contains primarily non-hazardous materials, but the sealed capacitors contain two potentially hazardous substances, acetonitrile and Tetraethylammonium tetrafluoroborate. If the UPS is charged at a high level and/or the temperature of the capacitor exceeds the suggested operating temperature at its given lifetime (see User Manual for suggested charging and operating temperatures

<https://www.panduit.com/content/dam/panduit/en/products/assets/u/up/ups/ups0/ups00100dc/media/N-PUCD-0009--REV04--ENG.pdf>), these hazardous substances may vent or leak onto the outside of the UPS housing. A failed unit can present itself as a white powder on the lowest part of the UPS. Figure 1 shows a UPS where the ultracapacitors have vented.

If the acetonitrile vents onto the UPS, it may ignite if it is near sparks or flames. Human contact with Tetraethylammonium tetrafluoroborate that has vented onto the UPS housing can cause skin irritation, eye damage and, if ignited, could produce toxic gases. Be sure to use safety goggles and gloves if you are near a UPS that leaked.

**FIGURE 1**



White powder indicating a failed unit.

**REQUESTED CUSTOMER ACTION TO PREVENT HAZARD.** To mitigate the risk of these safety hazards occurring, Panduit has created a firmware update which, when installed, will automatically notify the user when the unit has vented, shut down the operation of the UPS, and inform the user that replacement of the UPS is required.

If you have a Panduit UPS or Network Zone System containing a UPS, you must determine if your UPS or Network Zone System is affected by this potential failure (an “Affected Product”). To determine if you have an Affected Product, please see the Product Identification section of this PSA.

***If you have an Affected Product, visually inspect the UPS for signs of leaking as shown in Figure 1. Do not install the Firmware Update if there are visual signs that the capacitors are leaking. Instead, remove the unit from service and replace it, following the PRECAUTIONS section of this PSA.***

***If there are no signs of leaking then install the new Firmware Update.***



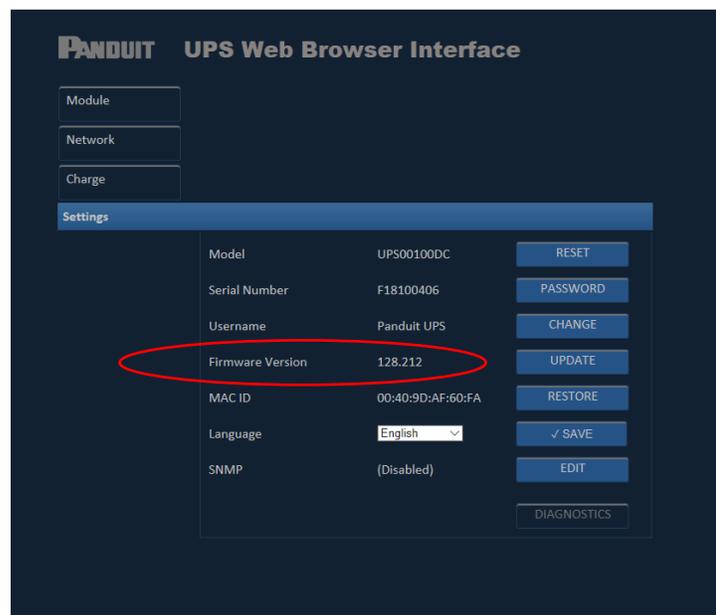
**CAUTION:** During the firmware update procedure, the UPS’ output (primary power and battery backup) will be disabled for approximately 10 minutes. Ensure connected equipment is powered down before continuing.

If you have an Affected Product with no signs of leaking capacitors, install the Panduit Firmware Update on each of your UPS units by following these steps:

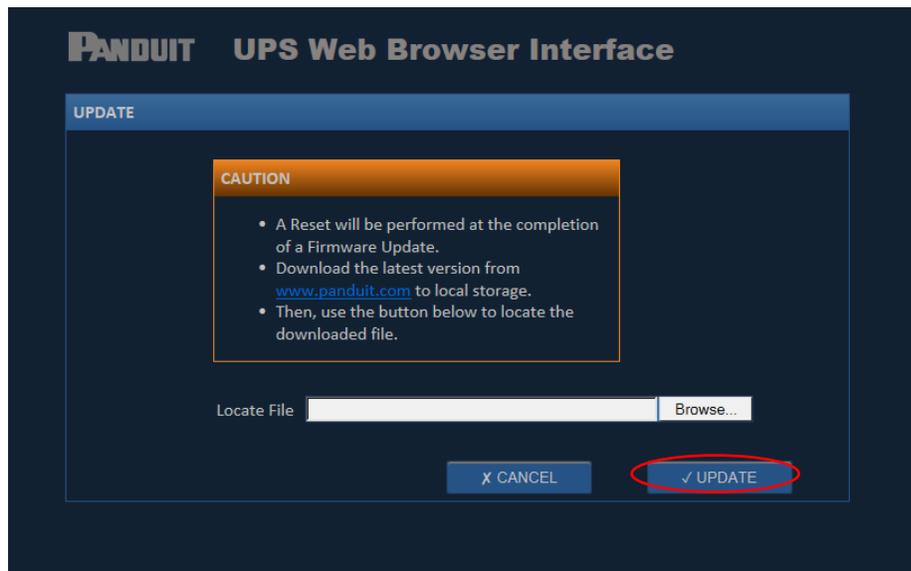
## Performing the Firmware Update Procedure:

1. Acquire the IP address of the UPS
  1. If the UPS is in default DHCP mode, the user will need to load a DHCP server service on the PC that will be used to communicate with the UPS.
  2. If the UPS is in Static mode, acquire the Static IP address that was assigned to the UPS from the user's IT personnel.
2. Login into the UPS
  1. Open Microsoft Internet Explorer 9, 10, and 11 on the user's PC.
    - i. In the URL type:
      1. `http://IP Address of the UPS'`
        - a. The 'IP Address of the UPS' is the address offered up by the user's DHCP server or the address that the user acquired from the user's IT personnel.
    - ii. Click "Settings" button
    - iii. If the default login and password has not been changed then enter the following in the popup
      1. Login: Panduit UPS
      2. Password: Serial Number of the UPS (found on the side of the UPS)
    - iv. If the default login and password has been changed then enter login and password from the appropriate personnel in the user's organization.

**NOTE:** On the Settings page (note the Firmware Version to determine if an update is needed). If the firmware version is **201.300** or higher, then the firmware has already been updated and you can disregard this notice.



3. Click the **UPDATE** button.
4. Click the hyperlink ([www.panduit.com](http://www.panduit.com)) in the pop-up window.

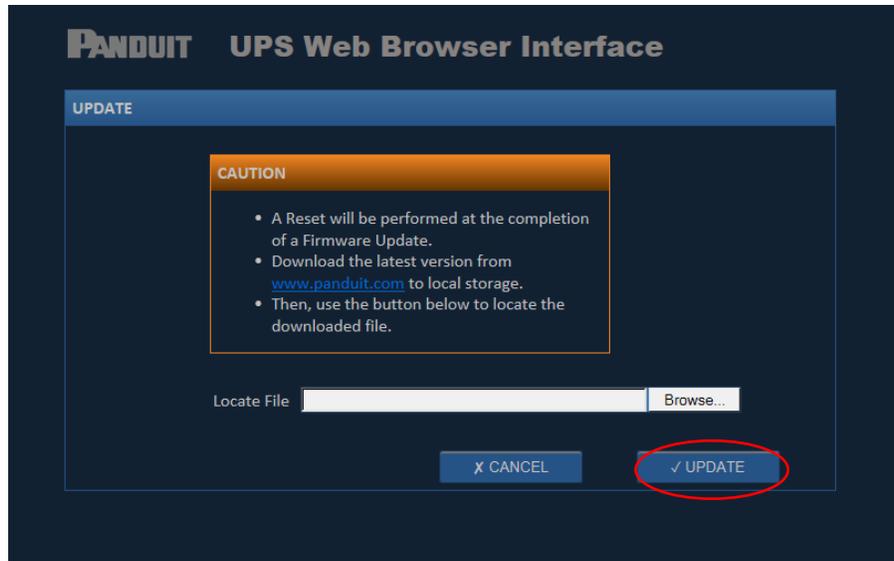


**NOTE:** This will open an Internet Explorer Window to the Panduit Home page.

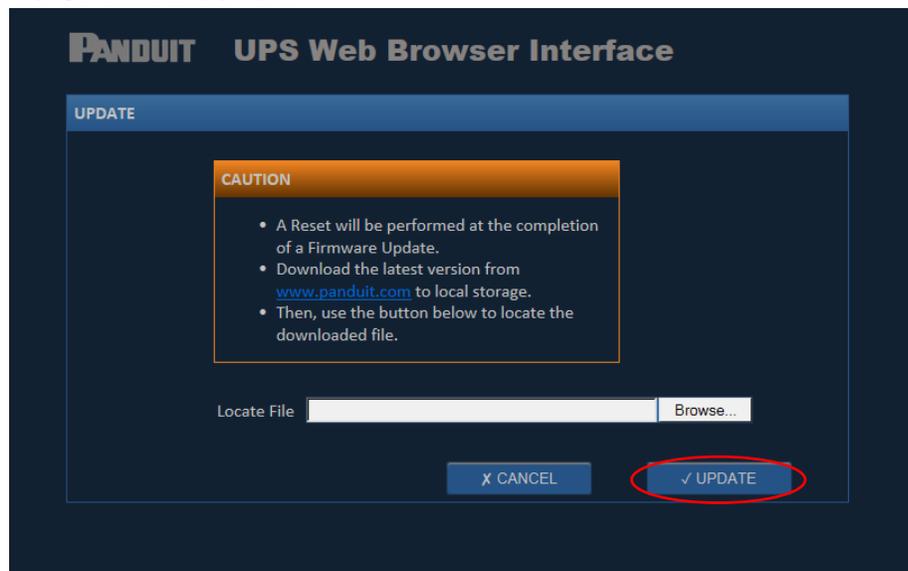
5. Click the Support pull-down on the upper-right of the page
6. Hover over **Download Center** and select **Industrial Uninterruptible Power Supply (UPS) Downloads**.
7. Scroll down to "Latest UPS Firmware" section on the web page and click the **Download Firmware Upgrade (BIN)** hyperlink.
8. A pop-up window will prompt the user for the next action to be taken. Click the ^ in the "Save" button and select **Save As**.
9. Select the location on the user's PC where the file should be saved.

**NOTE:** The location that the user saved the download file to be used later.

10. Ensure to keep the file name **image.bin**.
11. Exit out of the Panduit Download window.
12. In the UPS Update pop-up window, click the **Browse...** button.



13. Browse to the location that the “image.bin” file was downloaded.
14. Select the “image.bin” file.
15. Click on the **Open** button.
16. The path to the “image.bin” file on the user’s PC will appear in the “Locate File” text field.
17. Click the **UPDATE** button.

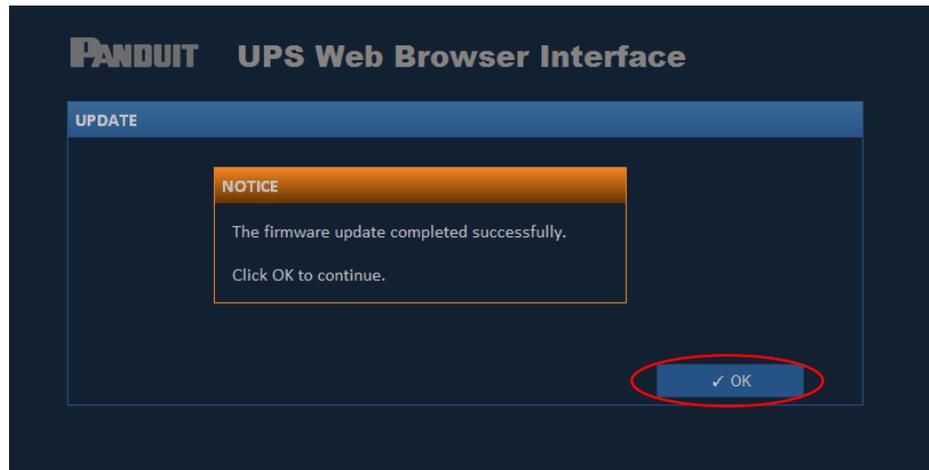


- a. This will start the firmware update process on the UPS

**NOTE:** If the Update brings the user to a “page not found” dialog, press F5 or Refresh the webpage. Do not use the Back button. Then browse to the correct location of the “image.bin” file and click the **UPDATE** button again.

**NOTE:** This update process will take about 15 minutes. Output power may be interrupted during this time.

18. After the firmware updated is completed click the **OK** button in the pop-up window.



19. After the firmware update has completed, the unit will go through a RESET.
- i. The RESET may cause the user to be logged out of the UPS.
  - ii. If the user is logged out of the UPS, use the following steps to log back into the UPS and confirm that the Firmware update properly completed on the UPS.
    1. Open Microsoft Internet Explorer 9, 10, and 11 on the user's PC.
    2. In the URL type:
      - a. http://IP Address of the UPS'
        - i. The **IP Address of the UPS** is the address offered up by the user's DHCP server or the address that the user acquired from the user's IT personnel.
    3. Click the **Settings** button to check that the "Firmware Version" has been updated.

Contact Panduit Technical Support if you need assistance updating the UPS firmware. (See Appendix 1)

## PRECAUTIONS TO TAKE WHEN REMOVING AND DISPOSING AN AFFECTED PRODUCT.



After installing the Firmware Update, if the UPS displays “End of Life” on the Module page of the Web Interface or if the UPS housing looks like the photos in Figure 1, remove the Affected Product as soon as possible. Engineering controls and PPE, such as gloves and safety goggles, should be used when handling any UPS that has leaked. Do not open any of the non-functional units. Place the non-functional units in a sealed plastic bag and dispose of them with your electronics waste.

**HOW TO ORDER A REPLACEMENT PRODUCT.** After installing the Firmware Update, if the UPS displays “End of Life” on the Module page of the Web Interface or if the UPS housing looks like the photos in Figure 1, Panduit will provide a replacement 100W UPS at no charge **for 1 year from the date of this PSA.** To request a replacement product, contact the Panduit Product Management Assistant identified below and provide the serial number(s) of any Panduit UPS units, your name, address, and date of purchase (if known). A replacement UPS will be sent to you free of charge within 30 days of request. If your UPS leaks after 1 year from the date of this PSA and your UPS is out of warranty, you will need to purchase a new UPS.

### Panduit contact

Elizabeth (Libby) Nelson  
Product Management Assistant  
[Elizabeth.nelson@panduit.com](mailto:Elizabeth.nelson@panduit.com)  
800-777-3300 x 86936

## PRODUCT IDENTIFICATION.

The products affected by this potential failure include:

Panduit UPS part numbers **UPS003024024015** and **UPS00100DC** manufactured prior to August 1, 2018.

Panduit Zone Systems part numbers listed below manufactured prior to August 1, 2018:

Z22N000089	Z22N-SNAA5	Z23N001240	Z23N-SBBAD5
Z22N000182	Z22R-615	Z23N001243	Z23N-SBBFD5
Z22N000187	Z22R-615S	Z23N001245	Z23N-SBBFD5/3P
Z22N000212	Z22R-625S	Z23N001250	Z23N-SDAAD5
Z22N000217	Z22R-S15	Z23N001251	Z23N-SEAAD5
Z22N000219	Z22R-S15S	Z23N001271	Z23N-SEEAAS
Z22N000223	Z23N001026	Z23N001274	Z23N-SEEAAS
Z22N000224	Z23N001037	Z23N001283	Z23N-SGABD5
Z22N000241	Z23N001038	Z23N001310	Z23N-SGAID5

Z22N000245	Z23N001039	Z23N-6BAAE5S	Z23N-SGAID5S
Z22N000256	Z23N001133	Z23N-6BABD5	Z23N-SGBSE5S
Z22N000262	Z23N001140	Z23N-6BACD5	Z23N-SHAAD5
Z22N000263	Z23N001141	Z23N-6BACF5	Z23N-SHHAD5
Z22N000264	Z23N001142	Z23N-6BAGD5/12P4	Z23N-SHHAD5S
Z22N000265	Z23N001146	Z23N-6BAGE5S	Z23N-SWAAB6
Z22N000298	Z23N001148	Z23N-6BBFD5	Z23N-WCACA5S/HD
Z22N-6DAD5	Z23N001152	Z23N-6EEAD5	Z23R-615
Z22N-6EAD5/12P4	Z23N001154	Z23N-FHAAD5	Z23R-615S
Z22N-SBAB5	Z23N001179	Z23N-SBAAD5	Z23R-625
Z22N-SBBE5S	Z23N001182	Z23N-SBABA5	Z23R-625S
Z22N-SD2D5	Z23N001187	Z23N-SBABD5	Z23R-S15
Z22N-SDAA5	Z23N001189	Z23N-SBABD5/ALC	Z23R-S15S
Z22N-SDAD5	Z23N001192	Z23N-SBABD5/NS	Z23R-S25
Z22N-SEAD5	Z23N001201	Z23N-SBABE5S	Z23R-S25S
Z22N-SHAA5	Z23N001219	Z23N-SBACA5	
Z22N-SHAD5	Z23N001236	Z23N-SBACA5S	
Z22N-SIAD5	Z23N001237	Z23N-SBACD5	

Figure 2 shows where the Manufactured date and Serial number are located on the UPS product label.

## FIGURE 2



This Product Safety Advisory is posted on the Panduit website, reference **PSA08102018001**. If this Product Safety Advisory does not affect you because you do not have the products any longer, or if you are Distributor, Panduit asks that you forward a copy of this notice, with any identifying documentation, immediately to the person or company that now has the product. We also ask that you contact Panduit Product Management and provide the location of the affected units.

We appreciate your immediate cooperation. If you have any questions, please contact us.

Sincerely,

Timothy Houghton  
 Group Products Manager  
[Timothy.Houghton@panduit.com](mailto:Timothy.Houghton@panduit.com)

## Appendix A

### Regional Technical Support Information

Theater	Country	Phone Number	Phone Hours	Local time Zone	Day of the week	Email Hours
EMEA	ALL	+44 (0) 208 601 7251	06:30 AM - 4:00 PM	GMT	Monday to Friday GMT	Monday 01:30 AM to Saturday 01:00 AM GMT
North America	US/Canada	+1 866 405 6654	08:30 AM - 7:00 PM	GMT-6	Monday to Friday GMT-6	Sunday 07:30 PM to Friday 06:00 PM GMT-6
LATAM	ALL	01 800 969 42 00 +52 33 3777 6000	08:30 AM- 7:00 PM	GMT-6	Monday to Friday GMT-6	Sunday 07:30 PM to Friday 06:00pm GMT-6
ASIA	ALL except Japan	See Customer Experience Contact List	08:30 AM - 5:15 PM	GMT+6	Monday to Friday GMT+6	From Monday 08:30am to Saturday 08:00am GMT+6
ASIA	Japan	+81 3 6863 6050	9.00 AM - 5.45 PM	GMT+7	Monday to Friday GMT+7	

### Asia Pacific Customer Experience Contact List

Country	Phone Number	Opening Hours	Local time Zone	Day of the week	E-Mail Address
Singapore	1800 PANDUIT (7263848)	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>
Malaysia	1800 80 1435	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>
Thailand	001 800 65 6385	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>
Philippines	1800 16 51 0364	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>
Indonesia	001 803 65 7571	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>

Australia	1800 PANDUIT (7263848)	8:45am - 4:45pm	GMT+8	Monday to Friday	<a href="mailto:aus-CustomerService@panduit.com">aus-CustomerService@panduit.com</a>
Japan	03 6863 6050	9.00am - 5.45pm	GMT+7	Monday to Friday	<a href="mailto:jpn-toiawase@panduit.com">jpn-toiawase@panduit.com</a>
Korea	02 2182 7300	8:00am to 5:00pm	GMT+6	Monday to Friday	<a href="mailto:KOR-CustomerService@panduit.com">KOR-CustomerService@panduit.com</a>
China	400 820 1900	8:00am to 5:00pm	GMT+6	Monday to Friday	<a href="mailto:CHN-CustomerService@panduit.com">CHN-CustomerService@panduit.com</a>
Hong Kong	800 96 5768	8:00am to 5:00pm	GMT+6	Monday to Friday	<a href="mailto:CHN-CustomerService@panduit.com">CHN-CustomerService@panduit.com</a>
India	1800 103 3200	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>
Taiwan	00800 165 1487	8:00am to 5:00pm	GMT+6	Monday to Friday	<a href="mailto:CHN-CustomerService@panduit.com">CHN-CustomerService@panduit.com</a>
Vietnam	0065 63 05 7800	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>
Other in ASIA	0065 63 05 7575	8:30am - 5:15pm	GMT+6	Monday to Friday	<a href="mailto:sgp-cea@panduit.com">sgp-cea@panduit.com</a>