



# UPS BATTERY MODULE



## Manual





DN-170120/ DN-170121/  
DN-170122/ DN-170123

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## Special Symbols

The following are examples of symbols used on the UPS or accessories to alert you to important information:

	<p>RISK OF ELECTRIC SHOCK – Observe the warning associated with the risk of electric shock symbol.</p>
	<p>CAUTION: REFER TO OPERATOR'S MANUAL – Refer to your operator's manual for additional information, such as important operating and maintenance instructions</p>
	<p>This symbol indicates that you should not discard the UPS or the UPS batteries in the trash. This product contains sealed, lead-acid batteries and must be disposed of properly. For more information, contact your local recycling/ reuse or hazardous waste center.</p>
	<p>This symbol indicates that you should not discard waste electrical or electronic equipment (WEEE) in the trash. For proper disposal, contact your local recycling/ reuse or hazardous waste center.</p>

# 1. Introduction

The extended battery pack can be added to UPS to extend the available battery time. Up to four EBPS can be installed with the ups.

# 2. Package Content

Check the accessories according to the packing list and contact the dealer in case of missing parts.

- 1x Battery Pack
- 1x User Manual
- 1x AC input cord
- 1x Plastic base
- 1x EBP Cable

# 3. Safety Warnings

## IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS

This manual contains important instruct icons that you should follow during installation and maintenance of the EBP. Please read all instruct icons before operating the equipment and save this manual for future reference.

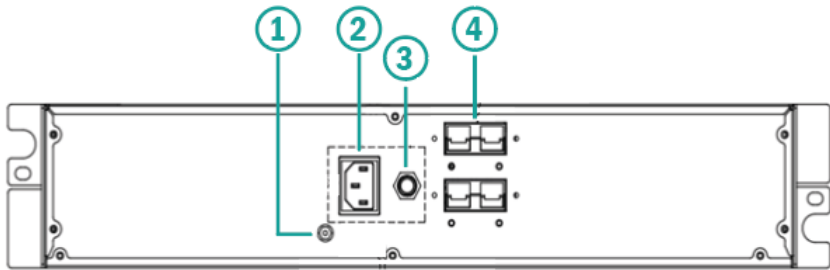


### CAUTION

- Batteries can present a risk of electrical shock or burn from high short-circuit current. Observe proper precautions. Servicing should be performed by qualified service personnel knowledgeable of batteries and required precautions. Keep unauthorized personnel away from batteries.

- Proper disposal of batteries is required. Refer to your local codes for disposal requirements.
- Never dispose of batteries in a fire. Batteries may explode when exposed to flame.

## 4. Rear Panel Description



1	GND screw hole	2	AC input socket
3	Breaker	4	SBS50 terminal

## 5. Installation

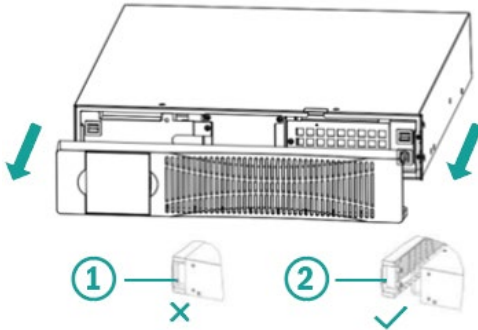
### Inspecting the Equipment

If any equipment has been damaged during shipment, keep the shipping cartons and packing materials for the carrier or place of purchase and file a claim for shipping damage. If you discover damage after acceptance, file a claim for concealed damage.

### To install the optional EBP(s) for a UPS:

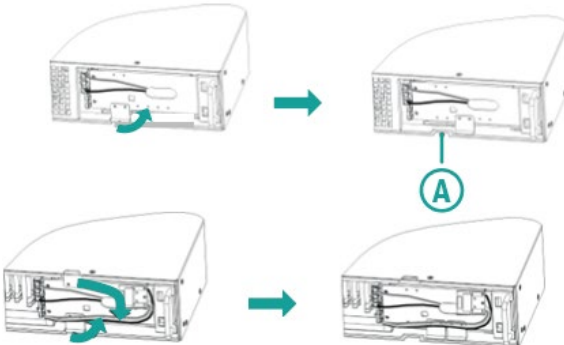
1. Remove the front cover of each EBP. Press the panel side, hold the other side, and quickly extract it, then extract the other side with display.

- Remove the front cover of UPS.  
Press the panel side with LCD display, hold the other side and quickly extract it, and then extract the other side with display. A ribbon cable connects the LCD control panel to the UPS. Do not pull on the cable or disconnect it. When remove the panel, operate as the following below Figure shows instead of the left one.



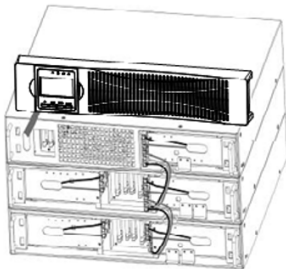
1	It is wrong that extracting the front cover from the handle.
2	It is correct that extracting the front cover from the panel.

- On the bottom of the UPS front cover, remove(A) the EBP cable knockout.

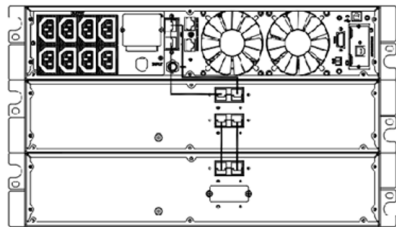


4. Plug the EBP cable(s) into the battery connector(s)
  - A small amount of arcing may occur when connecting an EBP to the UPS. This is normal and will not harm personnel. Insert the EBP cable into the UPS battery connector quickly and firmly. Connect red to red, black to black, and yellow to yellow. Press the two parts tightly together to ensure a proper connection.
  - To connect a second EBP, unclip the EBP connector on the first EBP and pull gently to extend the wiring to the EBP connector on the second EBP. Repeat for any additional EBPS.
  - Another kind of connection is, can pass from the rear panel of the EBP SBS50 terminal received UPS and parallel to the other EBP, pay attention to the positive and negative electrodes.

**Note:** Up to four EBPS may be connected to the UPS.



Front panel



Rear panel

5. Verify that the EBP connections are tight, and that adequate bend radius and strain relief exist for each cable.
6. Replace the EBP front cover.
  - To replace the cover, verify that the EBP cables are routed through the EBP cover knockouts, cover connects with the cover hook near the left side of the EBP cabinet. Repeat for each additional EBP.

- Put the front panel side with display to the panel port, put another side to the other two ports, then press it until the panel and the chassis are combined tightly.
7. Verify that all wiring connecting the UPS and EBP(s) is installed behind the front covers and is inaccessible to users.

## 6. Operation

### Configuring Battery Settings

Set the UPS for the number of EBPs installed.

To ensure maximum battery runtime, configure the UPS for the correct number of EBPs, refer to below Table for the appropriate setting of battery numbers and type. Use the up and down buttons to select the number of battery strings according to your UPS configuration.

All UPS and EBP Cabinets	Number of Battery Strings
UPS only (internal batteries)	1 (default)
UPS+1EBP	3
UPS+2EBPs	5
UPS+3EBPs	7
UPS+4EBPs	9
<b>NOTE:</b> The UPS contains one battery string; each EBP contains two battery strings.	

## 7. Maintenance

### Replacing Batteries

NOTE: DO NOT DISCONNECT the batteries while the UPS is in Battery mode.



- The EBP can be replaced when UPS is ON but be aware that if the utility fails at that time, the load of the UPS may NOT be protected.
- For safety, suggest removing input power before changing the batteries.

## **WARNING**

- Service should be performed by qualified service personnel knowledgeable of batteries and required precautions. Keep unauthorized personnel away from batteries.
- Batteries can present a risk of electrical shock or burn from high short circuit current. Observe the following precautions.
  - 1) Remove watches, rings, or other metal objects.
  - 2) Use tools with insulated handles.
  - 3) Do not lay tools or metal parts on top of batteries.
  - 4) Wear rubber gloves and boots.
- When replacing batteries, replace with the same type and number of batteries or battery packs. Contact your service representative to order new batteries.
- Proper disposal of batteries is required.
- Refer to your local codes for disposal requirements.
- Never dispose of batteries in a fire. Batteries may explode when exposed to flame.

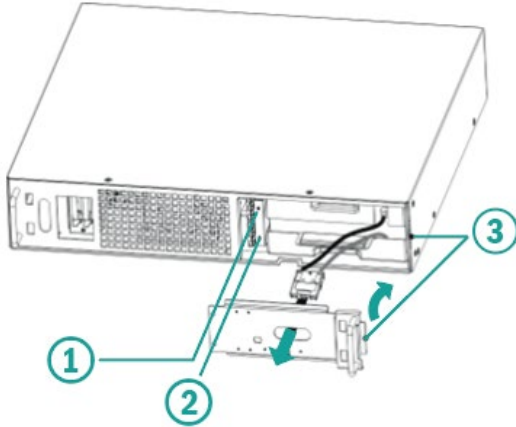


## **CAUTION**

The EBP is heavy. Lifting the cabinet requires a minimum of two people.

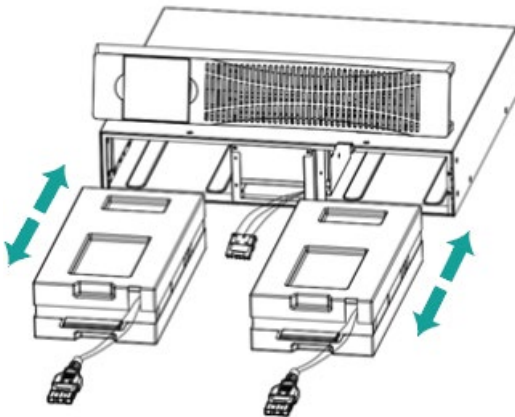
1. If the battery fault, the following steps are provided for modular unit to replace the new battery pack.
2. Remove the front panel of the battery box.

3. Remove the connection cables between battery box and UPS. Release the screw of the baffle of the battery pack. Remove the baffle from the left.

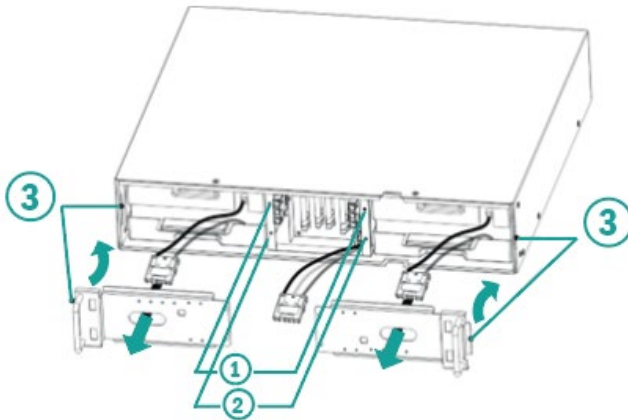


1	M4x8 Pan-Head
2	Screws (2 places)
3	Insert the thin-wall into the slot

4. Grasp the handle in front of the battery pack, take out of it and hold it, then remove the battery pack.

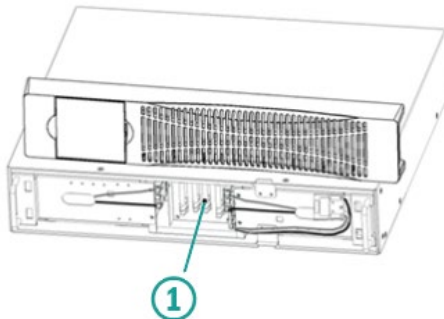


5. Hold the middle of the new battery pack, insert it. Make sure that the whole battery pack is in position.



1	M4x8 Pan-Head
2	Screws (4 places)
3	Insert the thin-wall into the slot

6. If the fuse melting, replace it from the front.



1	Take out the fuse from here
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## 8. Testing New Batteries

### To test new batteries:

1. Plug the EBP into a power outlet for 12 hours to charge the batteries.
2. Start up the UPS by pressing the startup combination button.
3. Press the battery test combination button to activate the battery test.

The UPS starts a battery test if the batteries are fully charged, the UPS is in Normal mode with no active alarms, and the bypass voltage is acceptable. During the battery test, the UPS transfers to Battery mode and discharges the batteries for 10 seconds. The LED indicators of the front panel stop cycling when the test is completed.

### Recycling the Used Battery

Contact your local recycling or hazardous waste center for information on proper disposal of the used battery or UPS.



#### **WARNING**

- Do not dispose of the battery or batteries in a fire. Batteries may explode. Proper disposal of batteries is required. Refer to your local codes for disposal requirements.
- Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.



## CAUTION

- Do not discard the battery pack or the batteries in the trash. This product contains sealed, lead-acid batteries and must be disposed of properly. For more information, contact your local recycling/reuse or hazardous waste center.
- Do not discard waste electrical or electronic equipment (WEEE) in the trash. For proper disposal, contact your local recycling/reuse or hazardous waste center.

## 9. Specifications (for with charger model)

MODEL		1K-EBP	1.5K-EBP	2K-EBP	3K-EBP
INPUT	Voltage	208/220/230/240VAC VAC			
	Frequency	50/60 Hz			
	Input Protection	Resettable Circuit Breaker			
CHARGER OUTPUT	DC Voltage	27,4 ± 1%VDC	41,0 ± 1%VDC	54,7 ± 1%VDC	82,5 ± 1%VDC
	DC Current	2.0A			
	Output Protection	Fuse			
BATTERY	Battery Type	sealed, maintenance free, valve regulated, lead acid			
	Battery Type (EBP)	2 strings of 2x 12V/ 9AH	2 strings of 3x 12V/ 9AH	2 strings of 4x 12V/ 9AH	2 strings of 6x 12V/ 9AH
	Recharge Time	12 hours to 90%			
Accessory		User Manual, AC input cord, plastic base, EBP Cable			

This is a Class A product. In home environment, this product may cause radio interference.

In this case, the user may be required to take appropriate measures.

Hereby ASSMANN Electronic GmbH declares that the Declaration of Conformity is part of the shipping content. If the Declaration of Conformity is missing, you can request it by post under the below mentioned manufacturer address.

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