

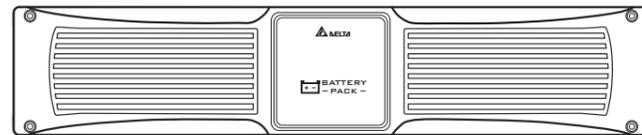
Delta UPS - Amplon Family

Delta External Battery Pack for Amplon RT 5/ 6/ 10kVA UPS

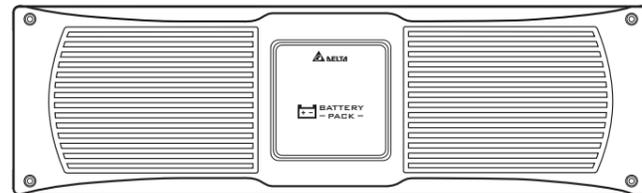
Quick Guide

1 Product Introduction

The Delta External Battery Pack is applicable to Delta Amplon RT 5/ 6/ 10kVA UPS. When the UPS is operating during a power outage, it provides DC power, which maintains inverter operation to support the critical loads connected to the UPS.



For Delta Amplon RT 5/ 6kVA UPS



For Delta Amplon RT 10kVA UPS

(Figure 1: Delta External Battery Pack Front View)

2 Important Safety Instructions

- Servicing of batteries and battery packs must be performed or supervised by qualified service personnel knowledgeable in batteries, battery packs and the required precautions. Keep unauthorized personnel away from batteries and battery packs.
- A battery can present a risk of electric shock and high short-circuit current.
- Forbid opening or removing the cover of the battery pack to avoid high voltage electric shock.
- The risk of dangerous high voltage is possible when the batteries are still connected to the UPS even though the UPS is disconnected from the mains. Do not forget to pull out the battery cable to completely cut off the battery source.
- Turn off the UPS and cut off the AC source before performing battery/ battery pack replacement.
- Only use the same type of batteries from the same supplier. Never use old, new and different Ah batteries at the same time.
- The number of batteries must meet UPS requirements.
- Do not connect the batteries in reverse.
- Use the voltage meter to measure whether the total voltage, after battery pack connection, is around $12.5Vdc \times$ the total number of batteries.
- The external slits and openings in the battery pack are provided for ventilation. To ensure reliable operation of the battery pack and to protect the battery pack from overheating, these slits and openings must not be blocked or covered. Do not insert any object into the slits and openings that may hinder ventilation.

- Do not allow liquid or any foreign object to enter the battery pack.
- Do not place beverages or any other liquid-containing vessels on or near the battery pack.
- Do not dispose of the battery or batteries in a fire. The batteries may explode.
- Do not open or mutilate the battery or batteries. The released electrolyte is harmful to the skin and eyes and may be toxic.
- Observe the following before replacing batteries:
 1. Remove watches, rings, or other metal objects.
 2. Use tools with insulated handles.
 3. Wear rubber gloves and boots.
 4. Do not lay tools or metal parts on the top of batteries.
 5. Disconnect charging source prior to connecting or disconnecting batteries' terminals.

Other information:

Delta Amplon RT UPS	5/ 6kVA	10kVA
Charge Voltage	217.6Vdc	272.0Vdc
Charge Current	0.7A (Default)	1.4A (Default)
Low Battery Shutdown	168 V \pm 3%	210V \pm 3%
The Number of Batteries	12V x 16 PCS	12V x 20 PCS

WARNING:

1. Please refer to the table below to select the charge current for Delta Amplon RT 5/ 6/ 10kVA UPS.

5/ 6kVA	Level 1	Level 2	Level 3	Level 4
Total Battery Capacity	5~9Ah	9~17Ah	18~30Ah	27~40Ah
Charge Current	0.7A	1.4A	3A	4A
10kVA	Level 1	Level 2	Level 3	Level 4
Total Battery Capacity	9~17Ah	13~20Ah	20~30Ah	27~40Ah
Charge Current	1.5A	2A	3A	4A

2. If you need to modify the charge current default setting, please contact your local dealer or customer service.

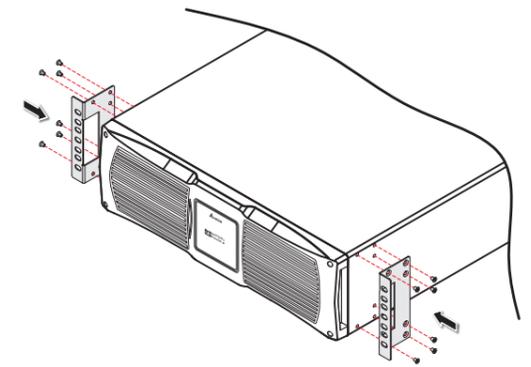
3 Package List

No.	Item	Q'ty
1	Delta External Battery Pack	1 PC
2	Quick Guide	1 PC
3	Battery Cable	1 PC
4	Bracket Ear	1 SET
5	Tower Stand Extender	2 PCS

4 Installation Procedures

Rack Mounting:

- 1 Attach the included bracket ears to the lateral mounting holes of the Delta external battery pack. See **Figure 2**. Please note that the picture below is just descriptive. The actual quantity and appearance of the bracket ears and screws might be different from the ones shown in **Figure 2**.



(Figure 2: Mount the Bracket Ears)

- 2 Follow steps 1 to 4 to install the Delta external battery pack in Delta's rail kit (optional). See **Figure 3**.

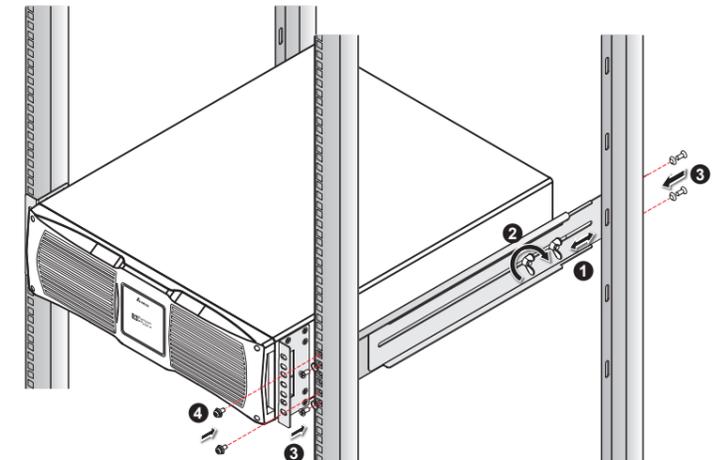
Step 1: Adjust the length of the rails according to your rack.

Step 2: Tighten the rails' nuts.

Step 3: Fix the rails on your rack.

Step 4: Insert the Delta external battery pack in your rack and tighten the provided screws.

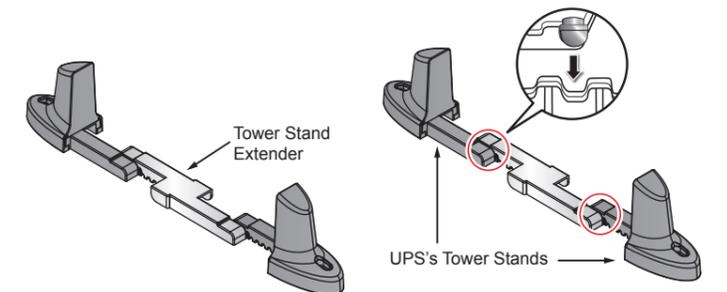
- 3 If you want to use a non-Delta rail kit, please only follow Step 4.



(Figure 3: Insert the Delta External Battery Pack to Your Rack)

Tower Mounting:

- 1 Connect the provided tower stand extenders with the tower stands provided in the UPS's carton (please take the UPS and the Delta external battery pack's size into consideration). See **Figure 4**.

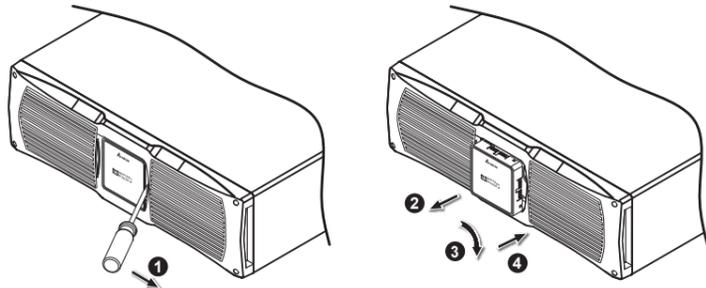


(Figure 4: Connect the Tower Stand Extenders with the UPS's Tower Stands)

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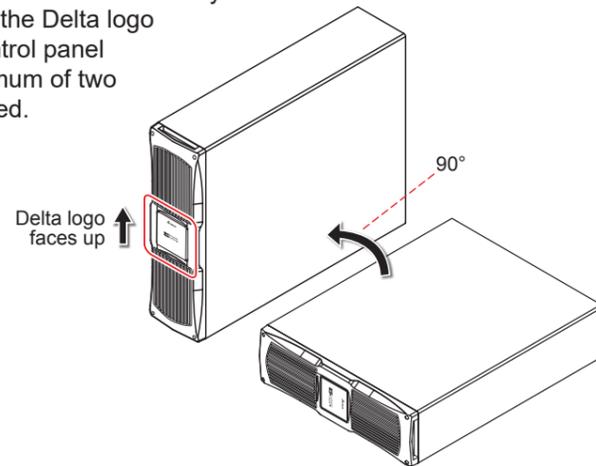


- Pull out the Delta external battery pack's control panel (1&2), rotate it 90° clockwise (3) and replace the control panel (4).



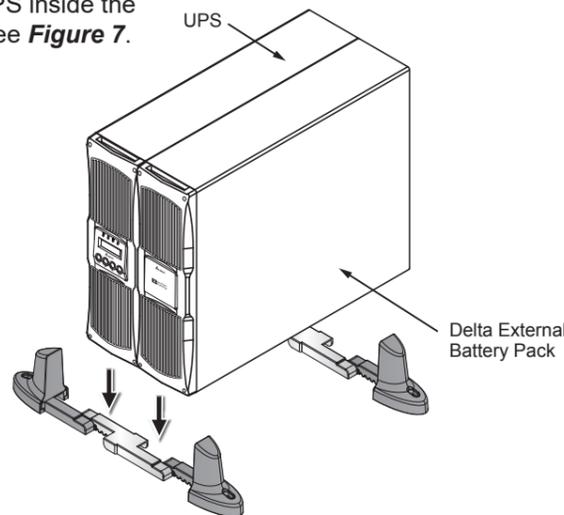
(Figure 5: Rotate the Delta External Battery Pack's Control Panel)

- Carefully lift the Delta external battery pack upright with the Delta logo shown on the control panel facing up. A minimum of two people are required. See Figure 6.



(Figure 6: Place the Delta External Battery Pack Upright)

- Place the Delta external battery pack and the UPS inside the tower stands. See Figure 7.

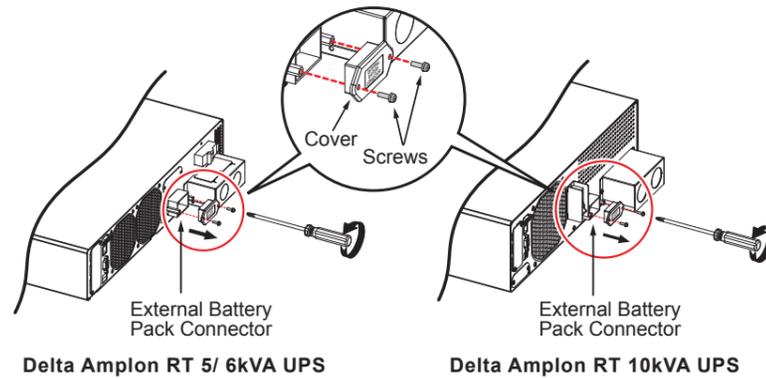


(Figure 7: Place the Delta External Battery Pack and the UPS inside the Tower Stands)

• **Connect the Delta External Battery Pack with the UPS:**

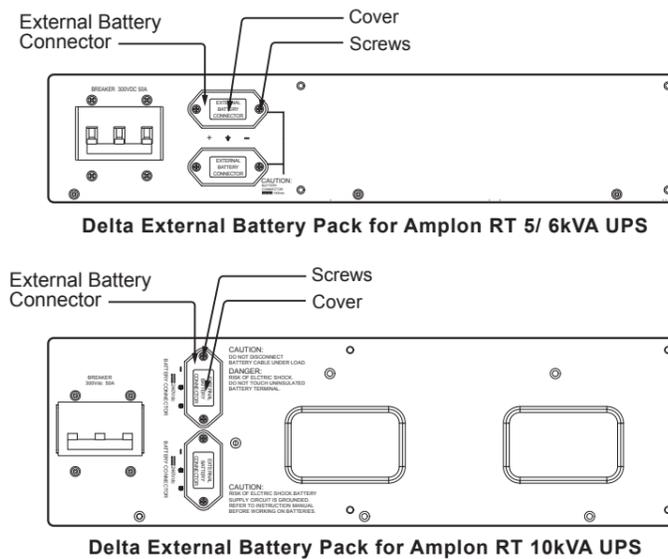
- WARNING:** You must use the provided battery cable packed in the carton of the Delta external battery pack to connect the Delta external battery pack and the UPS. The battery cable packed in the UPS's carton is for connection of Non-Delta external battery pack.

- Use a #2 screwdriver (not provided) to remove the screws and the cover of the UPS's external battery pack connector. Please see Figure 8.



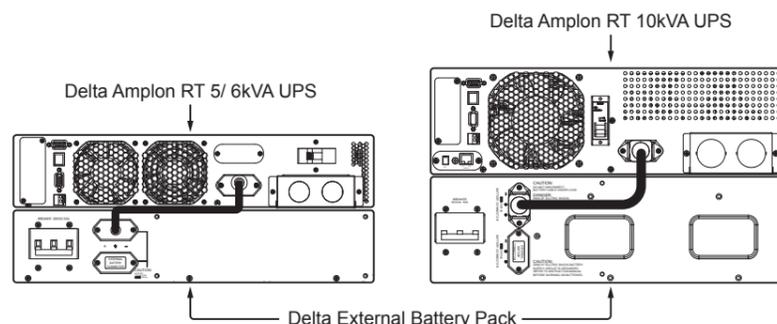
(Figure 8: Remove the Cover of the UPS's External Battery Pack Connector)

- For Delta external battery pack, use a #2 screwdriver (not provided) to remove the screws and the cover of the external battery connector. Please see Figure 9.



(Figure 9: Remove the Cover of the Delta External Battery Pack's Connector)

- Use the provided battery cable to connect the UPS and the Delta external battery pack. Please refer to Figure 10. Please pay attention to the symbols of +, -, and ⊥. Do not make a wrong connection. Ensure that the screws are tightly fixed after the connection. The tightening torque should be 6~8Kgf.cm.



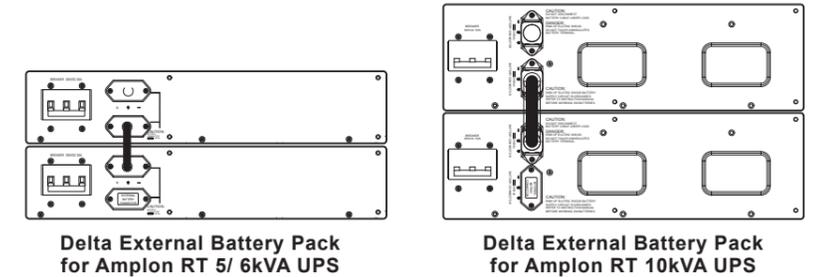
(Figure 10: Connect the UPS and the Delta External Battery Pack)

• **To Parallel Delta External Battery Packs:**

- NOTE:** For parallel application, only use the same type of Delta external battery packs (same Material No.)

If you want to parallel Delta external battery packs, please follow the procedures below:

- Use a #2 screwdriver (not provided) to remove the screws and the cover of the external battery connector from each Delta external battery pack. Please refer to Figure 9.
- Use the provided battery cable to connect the Delta external battery packs' battery connectors. Please refer to Figure 11. Please pay attention to the symbols of +, -, and ⊥. Do not make a wrong connection. Ensure that the screws are tightly fixed after the connection. The tightening torque should be 6~8Kgf.cm.



(Figure 11: Parallel the Delta External Battery Packs)

- NOTE:** Please refer to Figure 5-f and Figure 5-g shown in *Delta Amplon RT Series 5-10kVA UPS User Manual* for more parallel installation information.

5 Operation Procedures

- Follow *Delta Amplon RT Series 5-10kVA UPS User Manual* to execute input/ output connection.
- Follow **4. Installation Procedures** to connect the UPS and the Delta external battery pack.
- Turn on the Delta external battery pack's breaker and the UPS's input breaker.
- Follow *Delta Amplon RT Series 5-10kVA UPS User Manual* to start up the UPS.

6 Specifications

Product	Delta External Battery Pack	
Part No.	GES161B105700 GES161B105700-N*1	GES201B109700 GES201B109700-N*1
Applicable to	Delta Amplon RT Series 5/6kVA UPS	Delta Amplon RT Series 10kVA UPS
Battery Voltage/ Capacity	192Vdc/5Ah	240Vdc/9Ah
Protection	3-Pole Breaker 50A/300Vdc	
Operating Temperature	0 ~ 40°C	
Operating Humidity	0 ~ 95%	
Dimensions (W×D×H)	440 x 638 x 89 mm	440 x 595 x 131 mm
Weight	36 kg	66 kg

*1: The Delta external battery pack with this Part No. has no batteries inside. Please contact service personnel for more details.

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