# **DIGITUS**®

# **UPS BATTERY MODULE**



# **Manual**

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

# **Table of Contents**

| 1. | Introduction                            | 3  |
|----|---|----|
| 2. | Package Content                         | 3  |
| 3. | Safety Warnings                         | 3  |
| 4. | Rear Panel Description                  | 4  |
| 5. | Installation                            | 4  |
| 6. | Operation                               | 6  |
| 7. | Maintenance                             | 7  |
| 8. | Testing New Batteries                   | 9  |
| 9. | Specifications (for with charger model) | 11 |

#### 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
- 4x Plastic base
- 1x FBP Cable

## 3. Safety Warnings

# IMPORTANT SAFETY IN STRUCTIONS – SAVE THESE IN STRUCTIONS

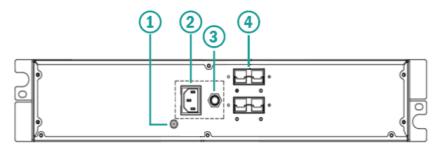
This manual contains important instruct icons that you should follow during installation and maintenance of the EBP. Please read all instruct icons before operating the equipment and save this manual for future reference.



 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.

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

- Plug the EBP cable(s) into the battery connector(s) as shown in Fig. 1
  - 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.
- Connecting mode: pass from the rear panel of the EBP SBS50/ SB50 terminal received UPS and parallel to the other EBP, pay attention to the positive and negative electrodes.

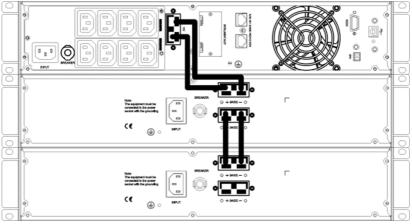


Fig. 1 Battery terminal wiring

- 2. Verify that the EBP connections are tight and allow adequate bend radius and strain relief exist for each cable.
- 3. There is charger inside the EBP, please plug the power cord to Manis for charging.

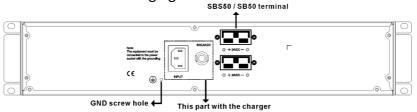


Fig. 2 Battery pack rear panel

### 6. Operation

#### **Configuring Battery Settings**

Set the UPS for the number of EBPs installed.

To ensure display the battery backup time more accurately, it is necessary to set the correct battery capacity. According to the number of built-in batteries and external battery packs of UPS, the total capacity of batteries connected to UPS is calculated, and the battery capacity of UPS is set through LCD screen (connected battery capacity = (AH number of single battery \* number of groups).

The following table shows the battery pack number and ah setting value of ups and its supporting battery pack.

| All UPS and EBP<br>Cabinets   | Number of Battery<br>Strings | UPS LCD Battery capacity setting |  |
|-------------------------------|------------------------------|----------------------------------|--|
| UPS only (internal batteries) | 1 (default)                  | 9AH (default)                    |  |
| UPS+1EBP                      | 3                            | 27 AH                            |  |
| UPS+2EBPs                     | 5                            | 45AH                             |  |
| UPS+3EBPs                     | 7                            | 63AH                             |  |
| UPS+4EBPs                     | 9                            | 81AH                             |  |

**NOTE:** The UPS contains one battery string; each EBP contains two battery strings.

#### 7. Maintenance

#### **Replacing Batteries**

NOTE: DO NOT D ISCONNECT 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 bum 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.



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

#### **Battery module replacement**

If the battery fault, the following steps are to replace the battery module in the battery pack.

- 1. Remove the connection cables between battery packs and UPS.
- 2. Remove the front panel of the battery pack as Fig. 3.



Fig. 3 Remove the front panel

3. Release the screws of the battery module baffle as the Fig 4 shows;

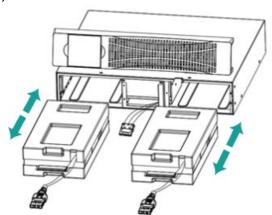
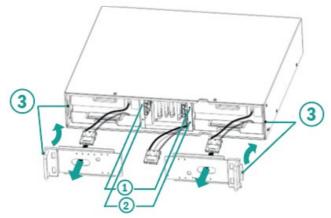


Fig. 4 Battery module baffle

- 4. After replacing the battery pack, insert it into the chassis as the Fig.5;
- 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 |

# 8. Testing New Batteries

#### To test new batteries:

- 1. Plug the UPS & EBP input power cord 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.



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

| MC                | DDEL                  | 1K-<br>EBP  | 1.5K-<br>EBP                   | 2K-<br>EBP                        | 3K-<br>EBP                     |
|-------------------|-----------------------|---|--------------------------------|-----------------------------------|--------------------------------|
|                   | Voltage               | 208/220/230/240VAC VAC                                  |                                |                                   |                                |
| INPUT             | Frequency             | 50/60 Hz  |                                |                                   |                                |
|                   | Input<br>Protection   | Resettable Circuit Breaker                              |                                |                                   |                                |
|                   | DC Voltage            | 27,4 ±<br>1%VDC   | 41,0 ±<br>1%VDC                | 54,7 ±<br>1%VDC                   | 82,5 ±<br>1%VDC                |
| CHARGER<br>OUTPUT | DC Current            | 1.4 A   |                                |                                   |                                |
|                   | Output<br>Protection  | Fuse  |                                |                                   |                                |
|                   | Battery Type          | sealed, maintenance free, valve regulated,<br>lead acid |                                |                                   |                                |
| BATTERY           | Battery Type<br>(EBP) | 2 strings<br>of 2x 12V/<br>9AH                          | 2 strings<br>of 3x 12V/<br>9AH | 2 strings<br>of 4x<br>12V/<br>9AH | 2 strings<br>of 6x<br>12V/ 9AH |
|                   | Recharge<br>Time      | 12 hours to 90%   |                                |                                   |                                |
| Acce              | essory                | User Manual, AC input cord, plastic base, EBP<br>Cable  |                                |                                   |                                |

This is a Class C2 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.

#### info@assmann.com

Assmann Electronic GmbH Auf dem Schüffel 3 58513 Lüdenscheid Germany

