



Introduction
Commissioning
Troubleshooting
SW\_V0.2.3 ~ SW\_2.1.7

# HSS224 SERIES LOCAL POWER SUPPLY



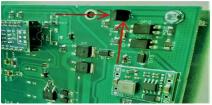
| Technical specifications       |   |  |  |  |
|--------------------------------|---|--|--|--|
| Working voltage                | 85 ~ 264VAC (47 ~63Hz)                                |  |  |  |
| Maximum current draw           | 0.4A  |  |  |  |
| Nominal output voltage         | 27.6VDC   |  |  |  |
| Maximum output current         | 2A  |  |  |  |
| Maximum battery charge current | 0.7Ah   |  |  |  |
| Maximum battery-<br>capacity   | 2 x 12v 7Ah   |  |  |  |
| Battery shutdown voltage       | 19.5VDC   |  |  |  |
| Secondary fuses                | 2 x pico 3.15A  |  |  |  |
| Outputs                        | 1x relay fault 30V 2A (no/c/nc) & 2x Aux 24VDC max 2A |  |  |  |
| Protection class               | IP40  |  |  |  |
| Isolation class                | I   |  |  |  |
| Operation temperature          | from -5°C to 40°C                                     |  |  |  |
| Material                       | Metal   |  |  |  |
| Colour Code                    | Ral 7038 or Ral 7012                                  |  |  |  |
| Dimensions                     | 324 x 325 x 80 mm                                     |  |  |  |
| Weight                         | 3 kg  |  |  |  |



| Indicator guide |        |                                     |  |  |
|-----------------|--------|-------------------------------------|--|--|
| Indicator       | Color  | Identifier                          | Description  |  |
| ON              | Green  | Indicates that the device is on     | In normal mode, it is on and in case of power failure or there is a problem in the power supply, it will blink   |  |
| FAULT           | Yellow | Indicates an fault                  | If there is any fault in the system, it will be turned on  |  |
| EARTH           | Yellow | Indicates an earthfault             | If the positive or negative line is connected to the ground, it lights up  |  |
| BATTERY         | Yellow | Indicates battery failure           | It turns on when the battery is damaged and flashes when the battery is not recognized   |  |
| ОИТРИТ          | Red    | Indicates the status of outputs     | In normal mode, it blinks, which increases with the increase in consumption. In case of a short circuit in the output or an increase in consumption above the permissible limit, it remains fully lit. |  |
| CHARGE<br>STATE | Red    | Indicates the battery charge status | It is on when the battery is charging. When the battery is fully charged, it blinks and when there is no battery, it is off  |  |

### Terminals guide

| 28V IN         | Input terminal from switching power supply (27.6V)                  |  |
|----------------|---|--|
| FUSE BATT      | Battery protection fuse (3.15A)                                     |  |
| BATT           | Battery connection terminals (2x12V)                                |  |
| RELAY FLT      | Output relay terminals for Fault in the system (NO COM NC)          |  |
| FUSE AUX       | Output protection fuse (if the electronic protection does not work) |  |
| AUX 1          | Output number 1 (+/-)   |  |
| AUX 2          | Output number 2 (+/-)   |  |
| L              | phase input terminal (85 ~ 264VAC)                                  |  |
| N              | Null input terminal (85 ~ 264VAC)                                   |  |
| - <del>-</del> | Ground input terminal   |  |
| +V             | Switching power supply output terminal                              |  |
| -V             | Switching power supply output terminal                              |  |
| J1             | Enabling or disabling the earth fault jumper (on the board)         |  |
|                |   |  |







#### Installation and commissioning

Open the four screws on the device door. (1)

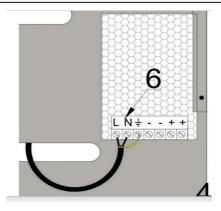
Open the two 28v IN power supply wires (2)

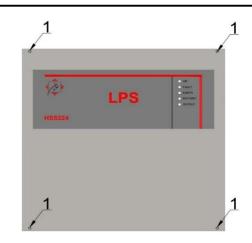
open the four screws at the corner of the screen (3).

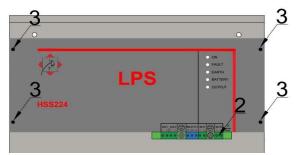
Install the device in place with four suitable screws (4) (if necessary, open the switching power supply from the bottom of the device (5))

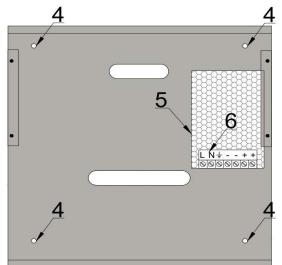
Reinstall the screen and connect the two 28V power supply wires whatchful the polarity. (3) (2)

Connect the 220V power cable to the  $/L/N/\frac{1}{2}$  terminals. (6) (Make sure the power is off before closing)







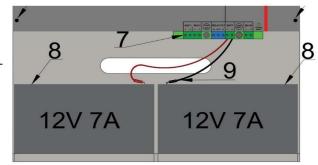




Connect the consumer cable to the AUX1/AUX2 terminals (7) (make sure the polarity is correct)

Put in two 12V batteries inside the device (8)

Connect the battery terminal wires (9) (pay attention to the polarity of the batteries, wrong connection will burn the fuse and damage to the device)



Close the device door and connect the mains power.

After a few seconds, the green LED of the device turns on and the red OUTPUT LED starts flashing.

The device has the ability to work 24/7 and full load.

### troubleshooting

| ON LED is blinking and FAULT LED is on and the battery is not charging.               | The power of the device is cut off or the board input power supply is less than 27.6 volts (the switching power supply is defective)   |
|---|--|
| The green ON LED is blinking, and the OUTPUT LED is on .                              | The input power of the board is less than 27.6 volts (the switching power supply is defective) and the batteries are not connected, in this case the outputs are disabled.           |
| FAULT LED and OUTPUT LED are on.  | The consumption is higher than 2 amps, or there is a short circuit in the outputs, or the AUX fuse is burnt. By solving the problem, the outputs will be activated after 30 seconds. |
| The batteries are connected, but the BATTERY LED is flashing and the FAULT LED is on. | The total voltage of the batteries is less than 19 volts or the FUSE BATT is burnt   |
| FAULT LED and EARTH LED are on.   | A ground connection error has been detected on the positive or negative wire of the outputs. (check the route and cable of the consumers).   |
| BATTERY LED and FAULTLED are on.  | The batteries are damaged (replace them. After 15 minutes of replacing the batteries, the error will be resolved).   |

## HSS224 SERIES LOCAL POWER SUPPLY



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HaminSepehrSepahan LTD
Research & development department
Tel . +98 31-36623398

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