DC Power Supply and Battery Charger  
VA-6000BC

**Descriptions**

VA-6000BC is mainly used in VA-6000 system to provide stable and reliable spare DC power when there is no AC power supply.

**Features**

* Select charging mode automatically.
* Detection of Storage battery failure, overvoltage, over-temperature and overtime charging.
* Automatic temperature control fan and overheating protection.
* Storage battery can be changed, will not be influenced by the change of AC power supply.

**Basic Functions**

* Built-in battery charge management and monitoring circuit. Charging battery when AC power, battery voltage, and temperature is normal, it will automatically access to maintenance state after battery fully charged.
* Storage battery adopts two DC 24V lead-acid batteries or one DC 24V lead-acid battery.
* Selecting charging mode automatically, to ensure safety charging and service life: pre-charge, constant current, trickle charge.
* High charging efficiency and restore efficiency. Storage battery fault detection, overvoltage detection, over-temperature detection and overtime charging detection.
* Being suitable for multiple volumetric battery ≤ 200Ah.
* Dual internet interfaces, can realize hand in hand connection.

**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>VA-6000BC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Power</td>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
<td>~ 220V-240V 50/60Hz</td>
</tr>
<tr>
<td>Maximum Current</td>
<td>1.5A</td>
</tr>
<tr>
<td>Fuse</td>
<td>250V/2A, low speed type</td>
</tr>
<tr>
<td>DC Power Output</td>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
<td>24V storage battery</td>
</tr>
<tr>
<td>Maximum Current</td>
<td>50A each line</td>
</tr>
<tr>
<td>Charging</td>
<td></td>
</tr>
<tr>
<td>Maximum charging current</td>
<td>10A, adjustable</td>
</tr>
<tr>
<td>Heat dissipation</td>
<td>Temperature fan, forced-style</td>
</tr>
<tr>
<td>Machinery Index</td>
<td></td>
</tr>
<tr>
<td>Size (L x W x D)</td>
<td>484 x 88 x 447mm (19inch, 2U)</td>
</tr>
<tr>
<td>Weight</td>
<td>About 7.5kg</td>
</tr>
<tr>
<td>Mounting</td>
<td>Desktop or 19 inch cabinet</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Environment Requirement</td>
<td></td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>+5℃ ~ +40℃</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20℃ ~ +70℃</td>
</tr>
<tr>
<td>Relative Temperature</td>
<td>&lt;95%, (No condensation)</td>
</tr>
</tbody>
</table>
Front Panel <<

Connectors
1. Location hole.
2. AC power indicator light:
   (1) Off - AC power is not connected.
   (2) Green - AC power supply is normal.
3. Storage battery connection status indicator light:
   (1) Off - Storage battery connection normal.
   (2) Yellow - Storage battery connection off or battery failure.
4. Charging status indicator light:
   (1) Off - Storage battery is fully charged.
   (2) Yellow - Charger is charging the storage battery.
5. Battery output over voltage indicator light:
   (1) Off - Voltage normal.
   (2) Yellow - Over voltage, charging will be stopped automatically to protect the storage battery. (When storage battery voltage is over 30V, charger will stop charge, V-light will be on)
6. Storage battery output low voltage indicator light:
   (1) Off - Voltage normal.
   (2) Yellow - Low voltage. This case happens when the first time using no power storage battery or using failure storage battery, user need to change a new storage battery when it's failure storage battery. (When storage battery voltage is below 14V, V-light will be on, charger will remind storage battery is low voltage, at this time, charger will use small current to activate the battery until it become normal)
7. General working status indicator light of charger:
   (1) Off - Charger working normal.
   (2) Yellow - Charger failure, other failure state will happen at the same time, such as, storage battery is not connected, temperature sensor is not connected and etc.

Back Panel <<

Connectors
1. Storage battery connector, please note positive pole and negative pole.
2. DC24V output connector, please note positive pole and negative pole.
3. Temperature sensor input interface.
4. Storage battery voltage test input interface. Please note, it need to be correctly connected to the output end of storage battery, otherwise bad connection shall lead to being unable to charge, please note positive pole and negative pole.
5. Connection interface, connect to external controller, amplifier switcher, or zone amplifier CAN interface.
6. Communication address. "1", "2" is communication address bit, the largest address is 3, if there is only one device, "1", "2" shall both be put at bottom position; "3" means device working mode setting, please make it at top position when charger is used in VA-6000 system, please make it at bottom position when charger is not used in VA-6000 system, otherwise the charger cannot work normally; "4", "5" are for reservation, no function; "6" is terminal matched resistance, mainly used in abnormal communication case when many chargers working by hand in hand connection, and the "6" address bit of the last charger should be on, please note only the last charger, not all.
7. Current accumulator capacity tap selection switch, please select according to the current accumulator capacity.
8. Fan, when the temperature in the machine reaches same level, the fan will work automatically to lower the inner temperature of the machine. (When the cooling fin temperature inside machine reaches 35-45℃, fan will start working, the higher the temperature the higher the fan rotation speed.)
9. Ground point. Please note the reliable ground connection.
10. Power switch and input socket of main power with fuse.