Prostar High Frequency Rack UPS

Mercury Series  (1kVA -10kVA) 1:1
Function Features

1. True double-conversion online UPS
   A true double conversion UPS will provide clean, high level quality power to fully protect mission-critical devices such as sensitive networks, small computer centers, servers, telecom applications, as well as for industrial applications.

2. Pure sine wave output
   With pure sine wave output, guarantees compatibility for all kinds of loads. Its perfect power protection for versatile applications such as networking, telecom and other mission-critical applications.

3. Wide input voltage range (110V-300V)
   Mercury series can still provide stable power to connected devices under unstable power environments.

4. 50/60 Hz Frequency Converter Mode
   Lock output frequency at 50Hz or 60Hz to suit power sensitive equipments.

5. Output power factor 0.8
   Compared to the online UPS in the current market, Mercury series UPS provides better output power factor up to 0.8. It offers higher performance and efficiency for critical applications.

6. ECO mode operation for energy saving
   Offers efficiency as high as 97% to cut energy usage & cost. UPS power application via static bypass, timely returning to online double conversion when the need arises.

7. Emergency Power Off (EPO) Function
   This feature can secure the personnel and equipment in case of fires or other emergencies.

8. USB+RS232+RJ45+SNMP multiple communication for 1-3K models
   This feature allows either USB, RS232 or RJ45 communication port to work with SNMP interface simultaneously.
Mercury Series

Humanized panel display and turnable LCD screen

Front panel with LCD screen, intuitive display by way of figures and graphics etc, LCD screen can rotate freely, and LCD display can be consistent for both installation of Tower type or Rack mounted type UPS.

Rack/Tower Type Design

The installation mode of Racks and tower ups can be arbitrary switching. The hangers for racks and the stents for tower ups are random standard required, easy for choosing by users.

Unique Design
High Frequency Rack UPS

<table>
<thead>
<tr>
<th>Model</th>
<th>PHR1101B</th>
<th>PHR1101</th>
<th>PHR1102</th>
<th>PHR1103</th>
<th>PHR1106</th>
<th>PHR1110</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>1000 VA / 800 W</td>
<td>2000 VA / 1600 W</td>
<td>3000 VA / 2400 W</td>
<td>6000 VA / 4800 W</td>
<td>10000 VA / 8000 W</td>
<td></td>
</tr>
<tr>
<td>Battery Voltage</td>
<td>36V</td>
<td>72V</td>
<td>72V</td>
<td>192V</td>
<td>192V</td>
<td></td>
</tr>
<tr>
<td>Size, D X W X H (mm)</td>
<td>380 x 438 x 88</td>
<td>480 x 438 x 88</td>
<td>580 x 438 x 88</td>
<td>666 x 438 x 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Weight(kgs)</td>
<td>13</td>
<td>6.5</td>
<td>8.3</td>
<td>10</td>
<td>15</td>
<td>18</td>
</tr>
</tbody>
</table>

Input

<table>
<thead>
<tr>
<th>Voltage Range</th>
<th>Low Line Transfer</th>
<th>160VAC/140VAC/120VAC/110VAC ± 5%</th>
<th>110 VAC +3 % at 50% Load; 170VAC +3 % at100% Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Line Comeback</td>
<td>168VAC/148VAC/128VAC/118VAC ± 5 %</td>
<td>+10V Low Line Loss Voltage +10V</td>
<td></td>
</tr>
<tr>
<td>High Line Transfer</td>
<td>300 VAC ± 5 %</td>
<td>300VAC ± 3 %</td>
<td></td>
</tr>
<tr>
<td>High Line Comeback</td>
<td>290 VAC ± 5 %</td>
<td>10V High Line Loss Voltage - 10V</td>
<td></td>
</tr>
</tbody>
</table>

Frequency Range

40Hz ~ 70 Hz

46Hz ~ 54 Hz @ 50Hz or 56Hz ~ 64 Hz @ 60Hz

Phase

Single phase with ground

Efficiency

AC Mode: >0.99@nominal voltage (input voltage)

Battery Mode: >0.99 at 100% Load

Output

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Voltage Regulation</td>
<td>± 1% (Batt. Mode)</td>
<td>± 1%</td>
</tr>
<tr>
<td>Frequency Range (Synchronized Range)</td>
<td>47Hz ~ 53Hz @ 50Hz or 57Hz ~ 63Hz @ 60Hz</td>
<td>46Hz ~ 54 Hz @ 50Hz or 56Hz ~ 64 Hz @ 60Hz</td>
</tr>
<tr>
<td>Frequency Range (Batt. Mode)</td>
<td>50 Hz 0.25 Hz or 60Hz 0.3 Hz</td>
<td>50 Hz 0.1 Hz or 60Hz 0.1 Hz</td>
</tr>
</tbody>
</table>

Overload

100%~110%: audible warning
110%~130%: UPS shuts down in 60 seconds at battery mode or transfer to bypass when the utility is normal
>130%: UPS shuts down immediately at battery mode or transfer to bypass mode when the utility is normal

AC mode: 100%~110%: 10min
110%~130%: 1min >130%: 1sec
Battery mode: 100%~110%: 30sec
110%~130%: 10sec >130%: 1sec

Current Crest Ratio

3:1 max

Harmonic Distortion

≤ 3 % @ 100% Linear Load; ≤ 6 % @ 100% Non-linear Load

Transfer Time

AC Mode to Batt. Mode

0 ms

Inverter to Bypass

AC 4 ms

0 ms

Waveform (Batt. Mode)

Pure Sine Wave

Efficiency

AC Mode

87%

>89%

>90%

Battery Mode

83%

87%

89%

>88%

>89%

Battery

Battery Type

12V7AH

Depending on applications

Battery Numbers

3

Depending on applications

Recharge Time

4 hours recover to 50% capacity

Depending on applications

Charging current

1.0 A (max.)

1.0A/2.0A/4.0A/6.0A 10%

Charging Voltage

41.0VDC ± 1%

82.1 VDC ± 1%

218.4 VDC ± 1%

Environment

Operation Temperature

0 ~ 40 °C (battery life cycle will be shorten when temperature is above 25 °C)

Operation Humidity

<95 % and non-condensing

Operation Altitude

<1000m

Noise Level

Less than 50dBA @ 1 Meter

Less than 55dB @ 1 Meter

Less than 58dB @ 1 Meter

Management

Smart RS-232 or USB


Optional SNMP

Power management from SNMP manager and web browser

Remarks: Products specifications are subject to change without notice.