ZONHAN TW500 PURE SINEWAVE INVERTER

INPUT/OUTPUT INTRODUCTION

**Signal indicator**
- Green light: normal operation
- Red light: failure indication

**Power switch**
- ON: turn on (start working)
- OFF: turn off (stop working)

**USB output**
- Direct current output mode: 1A/5V

**Alternating current output**
The socket model is chosen by users: 12V/24V/48V switch into 110V/220V (±10%)

**6E PROTECTION FUNCTIONS**
- Under voltage protection
- Short circuit protection
- Over pressure protection
- Over temperature protection
- Reverse connection protection

**OLD AND NEW PERFORMANCE CONTRAST**

THE FIRST GENERATION
- Single-phase silicon controlled rectifier
- Three-phase diode bridge
- Simple design

THE SECOND GENERATION
- Double conversion structure
- Automatic control
- Non-inverter design

THE THIRD GENERATION
- 100% pure sine wave function
- Time delay design
- Automatic voltage regulation

*NOTE: The performance of each generation improves as you move from left to right.*
INTERNAL DISPLAY AND THE CORE TECHNOLOGY

Quality depends on the details
Professional research and development over 31 years

With pure copper and the high density of the copper strip voltage transformer
100% pure copper full power high frequency density coil transformer, output more stability, more safety

insurance with chip inserted
Load large current, loading safety

cooling fin
Large full aluminium material cooling fin, heat faster and more efficient

All copper ring
Used to suppress common mode noise, prevent interference signals generated by inverter affects the use of electrical appliances

Power tube
Import FAIRCHILD IGBT + IR CPU; Performance is more stable, more efficient. Built in cooling silicone, high temperature is not a problem

Circuit board
Use joint plate with the SMT patch technology. Combined with industrial production conditions, to ensure that the finished product zero error. With multiple shockproof function and anti-throw protection function.
Details highlight quality
Professional research and development over 31 years

THE SAFEST DESIGN——THE BUILT-IN FINE COPPER TRANSFORMER

WIN! built-in two fine copper isolation
To protect the safety of power source is to protect the safety of life.

FAIL! Other inverters only with simple relay
The transformer with any fine copper can't avoid breakdown—electrical appliances burning.
IF YOU COMPARE OUR PRODUCTS' FUNCTION WITH OTHERS, YOU WILL KNOW WHO ARE BETTER

Pure sine wave inverter can run any common devices which are connected to city power, with stable output voltage and frequency conversion startup function. Other inverter: Capacitive loads (such as LED flashlight with charging) have impact current at edge of a pulse, causing that it will be damaged by modified pure sine wave providing power and inductive loads work abnormally.

SOCKET AND PLUGS TYPE

- Australian
- Brazilian
- South Africa
- German-European
- French
- Spiral American-French
- American-French SS-4E
- American-French SS-6F
- American SS-48
- American XD-106-C
- American-French WD-601
- Universal
- Universal RCB
- Italian
- British
- Round Australian

You can choose all kinds of sockets and plugs with no worry.

WIRING DIAGRAM:

- Battery 12V
- Battery 12V
- Battery 12V
<table>
<thead>
<tr>
<th>Model : TW-500</th>
<th>TW-500-12V</th>
<th>TW-500-24V</th>
<th>TW-500-48V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AC Output</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous power:</td>
<td>500W</td>
<td>1000W</td>
<td></td>
</tr>
<tr>
<td>Surge power:</td>
<td>120%&lt;load&gt;&lt;load&gt;&lt;load&gt;</td>
<td>150%&lt;load&gt;&lt;load&gt;&lt;load&gt;</td>
<td></td>
</tr>
<tr>
<td>Output Waveform</td>
<td>Pure Sine Wave (THD &lt; 3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output Frequency</td>
<td>50Hz±0.1% or 60Hz±0.1% (Optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Output Voltage</td>
<td>100<del>120VAC / 200</del>240VAC (Optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DC Input</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC Input Voltage</td>
<td>12V DC</td>
<td>24V DC</td>
<td>48V DC</td>
</tr>
<tr>
<td>Voltage Range</td>
<td>10.8V-15.5V</td>
<td>21.6V-31V</td>
<td>43.2V-62V</td>
</tr>
<tr>
<td>Low Voltage Alarm</td>
<td>10.8V±0.2V</td>
<td>21.6V±0.4V</td>
<td>43.2V±0.8V</td>
</tr>
<tr>
<td>Low Voltage Shut down</td>
<td>10.2V±0.2V</td>
<td>20.4V±0.4V</td>
<td>40.8V±0.8V</td>
</tr>
<tr>
<td>Over Voltage Shut down</td>
<td>15.5V±0.2V</td>
<td>31V±0.4V</td>
<td>62V±0.8V</td>
</tr>
<tr>
<td><strong>Protection</strong></td>
<td></td>
<td></td>
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<tr>
<td>Converting Max. Efficiency</td>
<td>90% (Full Loading) / 95% (1/3 Loading)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Load Consumption</td>
<td>&lt;0.4A</td>
<td>&lt;0.2A</td>
<td>&lt;0.1A</td>
</tr>
<tr>
<td>Over Thermal:</td>
<td>Shut Off Output Automatically, Temperature &gt;75°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short circuit protection:</td>
<td>Reverse Polarity (External Fuse)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling Fan automatically run</td>
<td>Temperature ≥45°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Working temperature</td>
<td>-10°C ~ +50°C</td>
<td></td>
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<tr>
<td>Working humidity</td>
<td>20% ~ 90% RH Non-Condensing</td>
<td></td>
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</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-30°C ~ +70°C</td>
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<tr>
<td><strong>LED Indicator Light</strong></td>
<td>Inverter, Fault</td>
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<tr>
<td><strong>Packing</strong></td>
<td></td>
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<tr>
<td>Inner Box Dimensions (mm)</td>
<td>315<em>195</em>135mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner Box Weight (kg)</td>
<td>2.5kg</td>
<td></td>
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<tr>
<td>Carton Dimensions (mm)</td>
<td>420<em>340</em>460 mm</td>
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</tr>
<tr>
<td>Carton Weight (kg)</td>
<td>15 kg</td>
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