BESTEK

300 Watt POWER INVERTER

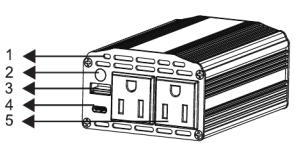
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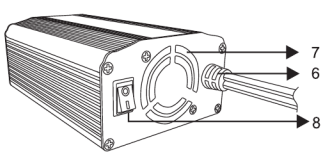
Thank you for purchasing BESTEK vehicle series products!
Please read the instructions carefully before using and operate strictly according to the instructions.

Introduction

Whether you are at home, on the road, or any remote location, you can trust BESTEK portable and backup power solutions, for the traveler on-the-go to keep your important devices powered up. Put BESTEK power in the palm of your hand to keep you safe, productive and entertained, anytime and anywhere. This power inverter is ideal for those who frequently on the road. The 300W DC-AC Power Inverter with DUAL USB charging ports is designed for all major brand notebook computers, digital portables like video camcorder, digital camera, iPad, iPod, cell phone, PSP, DVD player & etc.

Parts Diagram





1.Air Inlet
2.LED Power Indicator
3.USB-A(QC18W)
4.USB-C (PD 30W)
5.AC Output Socket ×2
6.DC Input Power cord
7.Cooling Fan
8.AC Power Switch

Functions

- The product's input is vehicular DC cigarette lighter joint and the output is two American Standard AC socket.
- This product makes the DC12V step-up through the transformer, and then converters to AC110V, 60Hz correction wave output.
- The product is equipped with a USB-A charging port and a USB-C charging port. USB-A supports QC3.0 quick charge protocol, the output is 5V/3A, 9V/2A, 12V/1.5A. USB-C supports PD3.1 power delivery specification protocol, the output is 5V/3A, 9V/3A, 12V/2.5A.
- This product has overload, over-current and short-circuit protection. Fully protect your electrical appliance safety.

Vehicle Power Inverters Compatible with Tesla

- The input voltage for product is 11-17V, perfectly suitable for the 16V cigarette lighter socket of Tesla vehicles.

Overload Protection Point

- The input voltage is 12V, when the AC output is overload of 350W~400W, the loading time of 300W~330W is more than 60 seconds, and the loading time of 330W~360W is more than 20 seconds.

Short-circuit Protection

- Twice is allowed(The time of short-circuit is more than 1 second every time) and then get into the locking state and the red light is always on. If you want to use, you must restart the host. Turn off the power and pay attention to restart host after red light is off. And the green light is always on ,it is in a normal working state.

Under-voltage Protection Point

- Under-voltage protection comes with restoration function, the under-voltage protection point is 10V~11V under no-load condition, and monitoring sampling time is more than 0.5 second. The recovery voltage of under-voltage is 11~12V. Starting up host at under-voltage point, the system defaults the voltage of battery is too low and makes it under lock status, not allows to start up. At the same time, the green indicator light flashes slowly.

Overvoltage Protection Point

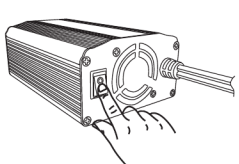
- Overvoltage protection comes with restoration function, the overvoltage protection point is 17~18V under no-load condition, the recovery voltage of overvoltage is 16-17.5V. Slowly flash of green indicator after overvoltage protection.

Function of automatically adjusting fan's speed

- Smart cooling fan system makes the car power inverter very silent when operating,and the fan runs faster when the device gets warmer or output power exceeds 70W. If you are concern about if the inverter working when the cooling fan work quietly,connect a more powerful device to test if the fan is working.

Product Instroductions

- Take out the product and connect the input cigarette lighter connector to the cigarette light port of your car.
- Press the product on switch.



- Check that the LED light is in a green and permanent state, and it can be used normally. If the LED lamp status is abnormal, please refer to item 9(troubleshooting) or contact customer service staff to help you solve it.
- Connect your electrical appliances to AC or USB ports.



Specifications

DC Input Rated	DC 11V~17V
AC Output Rated	AC 110-120V
USB Output	USB-A: 5V⎓3A,9V⎓2A,12V⎓1.5A; USB-C: 5V⎓3A,9V⎓3A,12V⎓2.5A Total: 48W
Rated Total Output Power	300W
Built-in Protection	Output short circuit protection, input overvoltage protection, output overload protection, over-current protection, over temperature protection, input under-voltage protection, USB output over-voltage protection, input anti-reverse-connection function.
Voltage of High Voltage Protection and Turn off	DC 17~18V
Voltage of Low Voltage Protection and Turn off	DC9.5V-10.5V
Insulation Strength	1.5KV/5mA/1min
Efficiency Rate	⩾83%
Working Environment	Temperature: -5~40℃, Humidity: 10~90%RH
Storage Humidity	Temperature: -20~80℃, Humidity: 5~95%RH

Safety Precautions

- Do not use with any appliances with dangerous voltage warning.
- Do not use with over 18V DC input.
- Make sure to provide adequate ventilation to the inverter.
- Never place inverter in an enclosure or near a heat source such as heat vent of cars and in direct sunlight.
- Do not use the inverter near any flammable liquid or gases.
- Do not expose to liquid or moisture or humidity.
- Do not handle with wet hands.
- This inverter's working temperature is -5℃-40℃(23℉-104℉)
- Do not put metal fragment (eg. such as wire) inside.
- Do not attempt to dissemble.
- Keep out of the reach of children.

Troubleshooting and Solutions

In order to facilitate customers to troubleshoot the use of the product, please refer to the following table of LED state.

Type of indicator light	State	Fault description	Fault handling
LED indicator light	The green light is always on	The inverter works normally	
	Green light flashing	Under voltage and over voltage	Please check whether the car battery is too low. In this scenario, USB works normally.
	Red light flashing	overload protection	1. Removal of load, LED restores state which the green light is always on , can be used normally. 2. Removal of load, LED can't restore the green light state, the switch should be restarted and then used again. 3. USB can be used normally in this scenario.
	The red light is always on	Short-circuit protection	1. Shut down, restart after the red light goes out, the green light restores the state of always on, and can be used normally 2. USB can be used normally in this scenario.
	Green and red light alternately flashes	Over temperature protection or fan does not run	1.Removal of load, Wait for 3-5 minutes to reboot, the green light restores the state of always on, and can be used normally. 2. If after the restart still can not work properly, please wait for a few minutes, since the temperature of whole machine has not dropped to t he normal standard. 3. Remove or turn off the load, allowing the host fan to rotate for 3-5 minutes, the green light restores the state of always on, and can be used normally. 4. USB can be used normally in this scenario.
	Turn off	There is no startup, fuse burn off or the whole machine does not work	1. Check switch is in On state. 2. Check whether the car's cigarette light port is damaged and cause unable to supply power. 3. USB and AC port can not be used normally in this scenario.