



# **ESC SERIES INVERTER/CHARGER**

## Pure sine wave inverter

# ESC series inverter/charger

ESC series pure sine wave inverter with AC charger is a multifunctional converting technology. It adopts the most advanced PWM control technology, and it has a lot of characteristics such as: precise control, security, efficiency, good reliability. This type inverter can supply electricity power to families, marketplace and so on. It's have the function of perfect intellectualized protection. The inverter researched and developed by ourselves with many highly technologies and intellectualized electrical components, which could debates the fussy control and protection made by apart components and improve the reliability of inverters as well as make the operation more convenient.



#### **Features**

- Over voltage shutdown
- Over load protect/Low voltage alarm and shutdown
- Short-circuit protect
- Over heat protect
- Advanced heat sink design and optimum component layout
- Standard AC outlet
- LED red/green indicator



#### Our ESC inverters are able to carry:

- Air conditioning
- Washing machine
- Cleaning machine
- Electric drill
- Recreational machines
- Incandescent
- Led lights
- Notebook computer
- Fans



### **Protect function**



#### **Low Voltage Protection**

**Function:** Automatically protect when be in low voltage: first alarm, then the voltage continuously reduce. LED red on. and the machine shuts down.

#### **Short Circuit Protection**

**Function:** Automatically self protect when short circuit: LED red on.

#### **Over Temperature Protection**

**Function:** It can automatically self protect when at high temperature: LED red on, and the machine shuts down.

#### **Overload Protection**

**Function:** Automatically self protect when load too much power: LED red on. the machine auto.

#### **Reverse Polarity Protection**

**Features:** Automatically protect when positive and negative cables are reverse connected: fuse burns automatically shuts down.

#### **Over Voltage Protection**

**Function:** Automatically protect when be in high voltage: LED red on, the machine automatically shuts down.

## **Connection Diagram**

#### 12VDC Inverter Connection



#### 24VDC Inverter Connection



#### Note: 48VDC Inverter are connected in similar ways.

MODEL	ESC300S	ESC800S	ESC1000S	ESC1500S	ESC2000S	ESC3000S	ESC5000S
Rated Power	300W	800W	1000W	1500W	2000W	3000W	5000W
Peak (surge) Power	600W	1600W	2000W	3000W	4000W	6000W	10000W
DC INPUT							
DC Input Voltage(optional)	12V 12/24V						24V
Voltage Range	10~15V	10~15V(12V)/ 20~30V(24V)					20~30V
Input Over voltage shutdown	15.5±0.5V	15.5±0.5V(12V) / 30±1V(24V)					30±1V
Input Under Voltage alarm	10.5±0.5V	10.5±0.5V(12V) / 20±1V(24V)					20±1V
Input Under Voltage shutdown	9.5±0.5V	9.5±0.5V(12V) / 19±1V(24V)					19±1V
No load current (A)	≪0.6	≤1.0/0.5		≤1.8/1.0	≤3.0/1.5	≤3.8/2.0	≤2.5
AC OUTPUT							
Output Voltage	110/220VAC±5%						
Output Frequency	50/60±0.5Hz						
Output waveform	Pure sine wave(THD<3%)						
Charging inpout							
Rated voltage	110/220Vac						
Rated frequency	50/60±0.5Hz						
Full of efficiency	≥80%						
Surge protection	Varistor						
Charging output							
Constant current	15A(12V)/8A(24V) The charging indicator is orange						
Constant pressure voltage	14.4V(12V)/28.8V(24V) The charging indicator is orange						
Float charging voltage	13.5V(12V)/27V(24V) The charging indicator is green						
SYSTEM							
operation model	Grid priority						
Conversions time	The municipal electricity is converted to contravariant $\leqslant~$ 20ms						
	The inverse transform into amunicipal electricity $\leqslant$ 20ms						
Max Efficiency	≥90%						
Cooling Fan	Yes (with intelligent fan)						
Connection	DC input terminal/AC output socket						
Over temperature alarm & shutdown	<b>75</b> ℃						
Temperature	0~45℃(operation)/0~60℃(storage)						
Dimension (W*D*H) (mm)	361*150*76	309*180*142	309*180*142	309*180*142	454*180*142	529*180*142	685*180*167
Weight (KG)	2.07	4.26	4.26	4.26	4.90	8.10	9.70

NOTES: Other power rating can customize by customer requirement



### Supplied Worldwide by EverExceed Corporation

