

# Pure Sine Wave Inverter

## SHI series



SHI series is a pure sine wave inverter which can convert 12/24/48Vdc to 220/230Vac 50/60Hz based on full digital and intelligent design. It features high reliability, high efficiency, concise outline, small volume, easy installation and operation. The inverter can be applied in many fields, such as household appliances, electric tools and industrial devices etc, especially for solar photovoltaic power system.

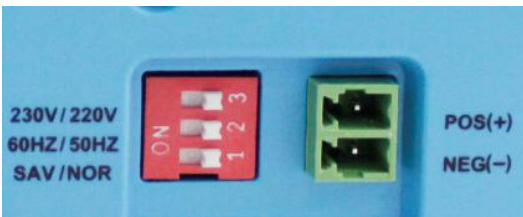
### Features:

- ◆ Input & output fully isolation
- ◆ Adoption of advanced SPWM technology, pure sine wave output
- ◆ Dynamic current loop control technology to ensure inverter reliable operation
- ◆ Wide DC input voltage range
- ◆ The output voltage and frequency can be switched
- ◆ Low output harmonic distortion (THD $\leq$ 3%)
- ◆ LED indicators for input voltage range, load power range, normal output & failure state
- ◆ Optional energy saving mode
- ◆ Wide working temperature range (industrial level)
- ◆ Continuous operation at full power

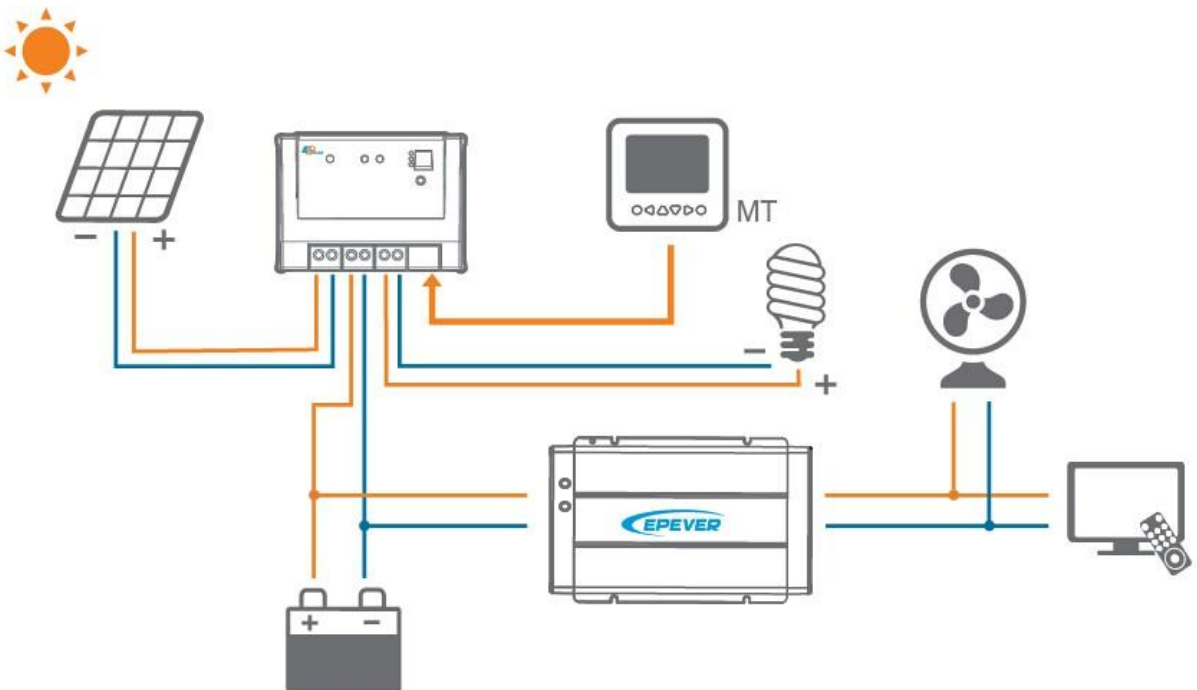


### Electronic protections:

- ◆ Output short circuit protection
- ◆ Input over voltage protection
- ◆ Overload protection
- ◆ Overheating protection
- ◆ Input low voltage protection
- ◆ Inverter abnormal protection



Mode Switch & Switch Node



## Technical specifications:

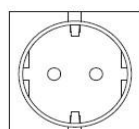
Types	SHI400-12	SHI400-22	SHI600-12	SHI600-22	SHI1000-22	SHI1000-42
Nominal Battery Voltage	12V	24V	12V	24V	24V	48V
Input Voltage Range	10.8~16Vdc	21.6~32Vdc	10.8~16Vdc	21.6~32Vdc	21.6~32Vdc	43.2~64Vdc
No Load Current	≤0.8A	≤0.45A	≤0.7A	≤0.45A	≤0.45A	≤0.35A
Output Wave	Pure Sine Wave					
Output Voltage	220Vac±3% / 230Vac±10%					
Continuous Power	400W		600W		1000W	
Power 10 sec	600W		900W		1500W	
Power 1.5 sec	800W		1200W		2000W	
Surge Power	900W		1350W		2250W	
Frequency	50/60Hz±0.2%					
Distortion THD	≤3% (resistive load)					
Efficiency at Rated Power	≥91%	≥92%	≥91%	≥92%	≥93%	≥93.5%
Max. Efficiency	≥92%	≥93%	≥93%	≥94%	≥94%	≥94%
Terminal	16mm <sup>2</sup>		25mm <sup>2</sup>		25mm <sup>2</sup>	
Dimensions	280×166×74.3mm		295×186×82mm		295×208×98mm	
Installation	150×158mm		150×178mm		150×200mm	
Hole Size	Φ5mm		Φ6mm		Φ6mm	
Net Weight	1.8kg		2.3kg		3.3kg	
Working Temperature	-20°C ~ +50°C					
Storage Temperature	-35°C ~ +70°C					
Humidity	< 95% (N.C.)					
Altitude	< 5000m(Derating to operate according to IEC62040 at a height exceeding 1000m)					

Types	SHI2000-22	SHI2000-42	SHI3000-22	SHI3000-42
Nominal Battery Voltage	24V	48V	24V	48V
Input Voltage Range	21.6 ~32Vdc	43.2 ~64Vdc	21.6 ~32Vdc	43.2 ~64Vdc
No Load Current	≤0.7A	≤0.7A	≤1.2A	≤1.0A
Output Wave	Pure Sine Wave			
Output Voltage	220Vac±3% / 230Vac±10%			
Continuous Power	2000W		3000W	
Power 10 sec	3000W		4500W	
Power 1.5 sec	4000W		6000W	
Surge Power	4600W		6900W	
Frequency	50/60Hz±0.2%			
Distortion THD	≤ 3% (resistive load)			
Efficiency at Rated Power	≥93%	≥94%	≥93%	≥94%
Max. Efficiency	≥95%	≥95%	≥95%	≥95%
Terminal	50mm <sup>2</sup>		50mm <sup>2</sup>	
Dimensions	436×249×116mm		507×249×116mm	
Installation	236×220mm		236×270mm	
Hole Size	Φ6mm		Φ6mm	
Net Weight	6.0kg		7.5kg	
Working Temperature	-20°C ~ +50°C			
Storage Temperature	-35°C ~ +70°C			
Humidity	< 95% (N.C.)			
Altitude	< 5000m(Derating to operate according to IEC62040 at a height exceeding 1000m)			

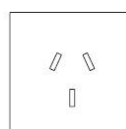
### Output socket (option) :



Universal

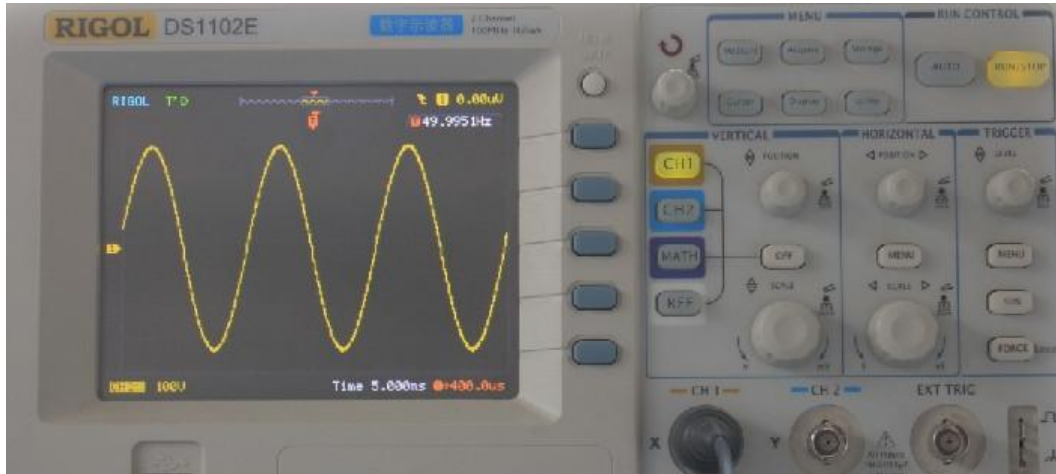


European

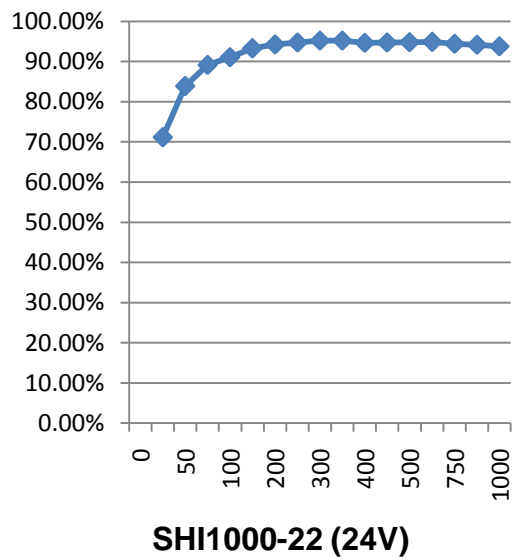
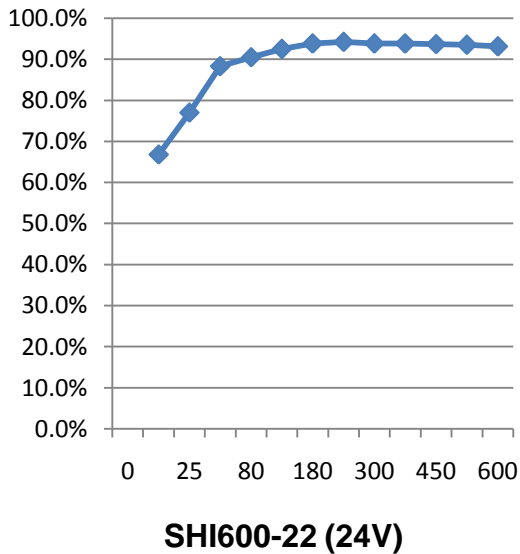


Australia/New Zealand

### Wave Form:



### Efficiency Curve :



BEIJING EPSOLAR TECHNOLOGY CO.,LTD.  
 Add: BLDG #18, CO.PARK ,NO.8 HEYING ROAD,CHANGPING DISTRICT, BEIJING, CHINA  
 Tel: 010-82894962 / 82894112  
 Fax: 010-82894882  
 E-mail: info@epsolarpv.com  
 Website: www.epsolarpv.com, www.epever.com