

# DC INVERTER

## Pure Sine Wave STI Series

200W-1000W



STI series is a sine wave power frequency inverter which can convert 12V or 24V DC to 220VAC or 230VAC 50Hz based on full digital and intelligent design. It features high reliability, high efficiency, concise outline, small volume, full protection function, easy installation and operation. The inverter can be applied in many fields especially for solar photovoltaic power system.

### Features:

- Complete isolation-type inverter technology, noiseless output
- Adoption of advanced SPWM technology, pure sine wave output
- Dynamic current loop control technology to ensure inverter reliable operation
- Wide DC input voltage range
- Excellent EMC design
- 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
- Inverter abnormal protection
- Input low/over voltage
- Overload
- Input reverse polarity
- Overheating protection

## Technical specifications:

MODEL	STI200-12-220	STI200-24-220	STI300-12-220	STI300-24-220	STI500-12-220	STI500-24-220	STI700-24-220	STI1000-24-220	STI1000-48-220
Nominal battery voltage	12V	24V	12V	24V	12V	24V	24V	24V	48V
Input voltage range	10.5~16V	21~32V	10.5~16V	21~32V	10.5~16V	21~32V	21~32V	21~32V	42~64V
Consumption no load (ON)	≤4W	≤5W	≤5W	≤6W	≤5W	≤6W	≤8.5W	≤10W	≤12W
Consumption no load (saving)	≤2W	≤2W	≤2W	≤2W	≤2W	≤2.5W	≤3W	≤3W	≤4W
Output voltage	AC220V±3%								
Continuous power	200VA		300VA		500VA		700VA	1000VA	
Power 10sec	300VA		450VA		750VA		1050VA	1500VA	
Power 1.5sec	400VA		600VA		1000VA		1400VA	2000VA	
Surge power	640VA		960VA		1600VA		2240VA	3200VA	
Output mode	Single phase								
Wave form	Pure Sine Wave								
Frequency	50Hz±0.2%								
Distortion THD (resistive load)	≤3%	≤2%	≤3%	≤2%	≤5%	≤2%	≤3%	≤3%	≤2%
Efficiency at rated power	≥81%	≥85%	≥81%	≥87%	≥81%	≥87%	≥87%	≥87%	≥89%
Max. efficiency	≥88%	≥89%	≥90%	≥91%	≥91%	≥93%	≥93%	≥93%	≥94%
Dimension	315x166x101mm				325x187x112mm			335x232x123.3mm	373x232x123.3mm
Net weight	4.5kg		5.3kg		7.3kg		9.4kg	11.8kg	
Working temperature	-20°C~+50°C								
Humidity	<95% (non-condensation)								
Altitude	<5000m (Derating to operate according to IEC62040 at a height exceeding 1000 m)								

## Technical specifications:

MODEL	STI200-12-230	STI200-24-230	STI300-12-230	STI300-24-230	STI500-12-230	STI500-24-230	STI700-24-230	STI1000-24-230	STI1000-48-230
Nominal battery voltage	12V	24V	12V	24V	12V	24V	24V	24V	48V
Input voltage range	10.5~16V	21~32V	10.5~16V	21~32V	10.5~16V	21~32V	21~32V	21~32V	42~64V
Consumption no load (ON)	≤4W	≤5W	≤5W	≤6W	≤5W	≤6W	≤8.5W	≤10W	≤12W
Consumption no load (saving)	≤2W	≤2W	≤2W	≤2W	≤2W	≤2.5W	≤3W	≤3W	≤4W
Output voltage	AC230V±3%								
Continuous power	200VA		300VA		500VA		700VA	1000VA	
Power 10sec	300VA		450VA		750VA		1050VA	1500VA	
Power 1.5sec	400VA		600VA		1000VA		1400VA	2000VA	
Surge power	640VA		960VA		1600VA		2240VA	3200VA	
Output mode	Single Phase								
Wave form	Pure Sine Wave								
Frequency	50Hz±0.2%								
Distortion THD (resistive load)	≤3%	≤2%	≤3%	≤2%	≤5%	≤2%	≤3%	≤3%	≤2%
Efficiency at rated power	≥81%	≥85%	≥81%	≥87%	≥81%	≥87%	≥87%	≥87%	≥89%
Max. efficiency	≥88%	≥89%	≥90%	≥91%	≥91%	≥93%	≥93%	≥93%	≥94%
Dimension	315x166x101mm				325x187x112mm			335x232x123.3mm	373x232x123.3mm
Net weight	4.5kg		5.3kg		7.3kg		9.4kg	11.8kg	
Working temperature	-20°C~+50°C								
Humidity	< 95% (non-condensation)								
Altitude	< 5000m (Derating to operate according to IEC62040 at a height exceeding 1000 m)								