



- Powering the world future -

# KSTAR ENERGY STORAGE SOLUTIONS

## OFF GRID INVERTERS

**KSTAR**

— Stock code: 002518 —

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Version number: KSD/L 2022-07

COMPANY PROFILE

Founded in 1993, Shenzhen KSTAR Science & Technology Co., Ltd (Stock Code: 002518) is a National Torch Plan Key High-tech Enterprise, and also a pioneer of UPS industrial and a total solution provider for Data Center Critical Infrastructure & Photovoltaic Inverter Systems in Mainland China. KSTAR is fully committed to the R&D and has been providing high-quality products with full service to over 90 countries and regions worldwide, leading the industrial development with innovation.



ISO9001



ISO14001



OHSAS18001



IECQ QC080000



KSTAR Industrial Park at Zhongkai Hi-Tech Zone, Huizhou, China



KSTAR Industrial Park at Guanlan Fuyuan industrial Zone, Shenzhen, China



KSTAR Industrial Park at Guangming Hi-Tech Zone, Shenzhen, China



Global Service Network



7×24 Response and Support



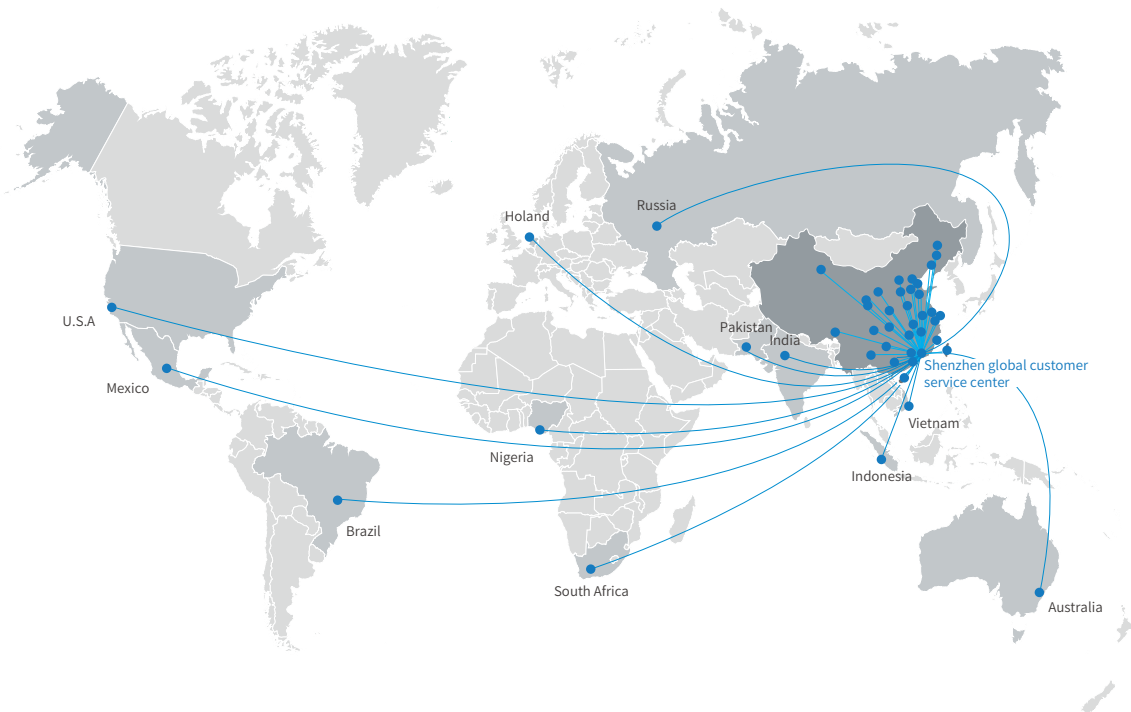
31 Domestic Service Centers  
172 Domestic Service Stations



National Customer Service Hotline:  
400-700-9662



12 Overseas Technical Service Centers  
40 Overseas Service Engineers





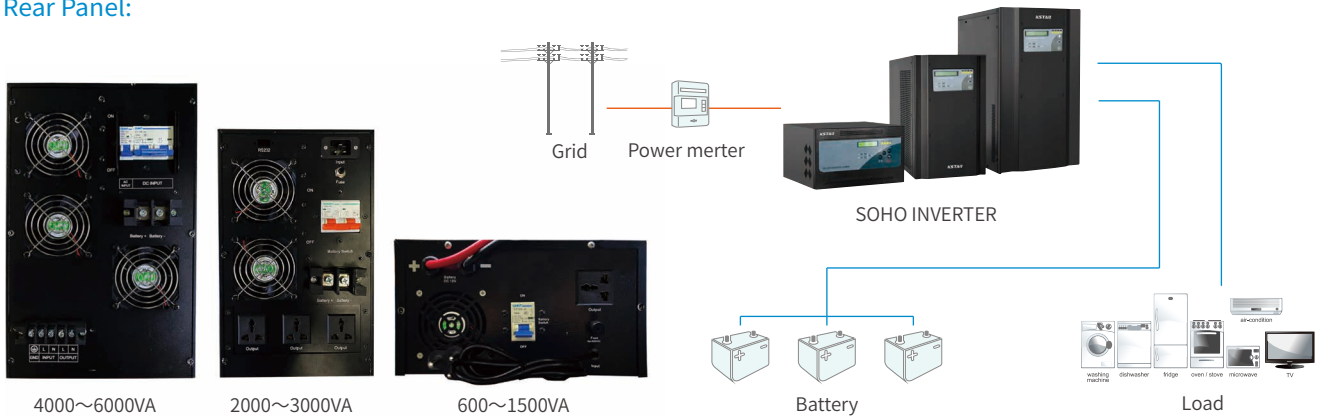
600VA~6kVA



Features:

- Wide input voltage range
  - Fully DSP control
  - UPS mode and inverter mode suit for different application
  - LED indicates the status
  - Auto-restart function when power back on line
- Cold start
  - Comprehensive and reliable protection
  - High performance of battery optimization
  - Sound & Light alarm function
  - Compatible with generator

Rear Panel:



Technical Specifications

MODEL	SH-600	SH-800	SH-1000	SH-1500	SH-2000	SH-3000	SH-4000	SH-5000	SH-6000	SH-7500	SH-10000
Capacity (VA/W)	600VA/480W	800VA/640W	1000VA/800W	1500VA/1200W	2000VA/1600W	3000VA/2400W	4000VA/3200W	5000VA/4000W	6000VA/4800W	7500VA/6000W	10000VA/8000W
LINE MODE											
INPUT											
Nominal voltage	220Vac(L+N+PE)										
Nominal frequency	50Hz										
Operating voltage range	INV: 120~300Vac UPS: 145~285Vac						INV: 160~265Vac UPS: 190~260Vac			187~253Vac	
Operating Frequency range	38~70Hz										
OUTPUT											
Output voltage	INV: 205~245Vac UPS: 170~255Vac						INV: 160~265Vac UPS: 190~260Vac			187~253Vac	
Power factor	0.8										
Harmonic distortion(THDV)	≤3%										
Frequency range	Same as Mains										
Waveform	Tracking mains										
Efficiency	≥94% (full load)						≥97% (full load)				
Transfer Time	10ms Max(5ms typical)										
Overload capacity	≤120%: 3min; ≤130%: 30s; >130%: shutdown immediately										
Scoket	IEC/Schuko						Terminal				
Battery Mode											
Battery Voltage	12Vdc	24Vdc	24/48Vdc		48Vdc			120Vdc	192Vdc		
Output Voltage	220Vac±5%				220/230Vac±1%						
Frequency Range	50±1Hz					50/60±0.5Hz					
Waveform(Mains.mode)	Pure sinewave										
Efficiency	≥82% (full load)						≥85% (full load)			≥89% (full load)	
Overload capacity	≤110%: 10s; >110%: shutdown immediately										
AC CHARGER											
Charging Alorihm	'3-Step charing										
Maximum Charging Current	10/20A selectable				10/20/30A selectable		10/20/30/40/50A selectable			12A	
Constant current charging voltage	14.1±0.3V/cell										
Floating Charging Voltage	13.8±0.3V/cell										
PROECTION											
Full Protection	Overload,over-temperature,short-circuit protectio,over-voltage,abnormal output voltage										
ALARM											
Battery Mode	Beep 1 time/10s,mute after 3min									Beep once	
Battery Low	Beep 2 times/1s									Beep 2 times/1s	
Overload	Beep 1 time/2s,4 times in row									Continously beeping	
Fault	Continously beeping									Continously beeping	
PHYSICAL											
Dimension W x D x H (mm)	272x285x165		313x295x189		352x220x358		452x260x418		313x633x788		
Net weight (kg)	12	14	15	19	26	28	38	48	51	60	85
OPERATING ENVIRONMENT											
Humidity range	0~90%RH @0~40°C (Non condensing)										
Noise level	≤55dB at 1 Meter						≤58dB at 1 Meter				

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SCC SOHO INVERTER Series

Off-grid solar rechargeable household inverter power supply  
600VA~6kVA



Features:

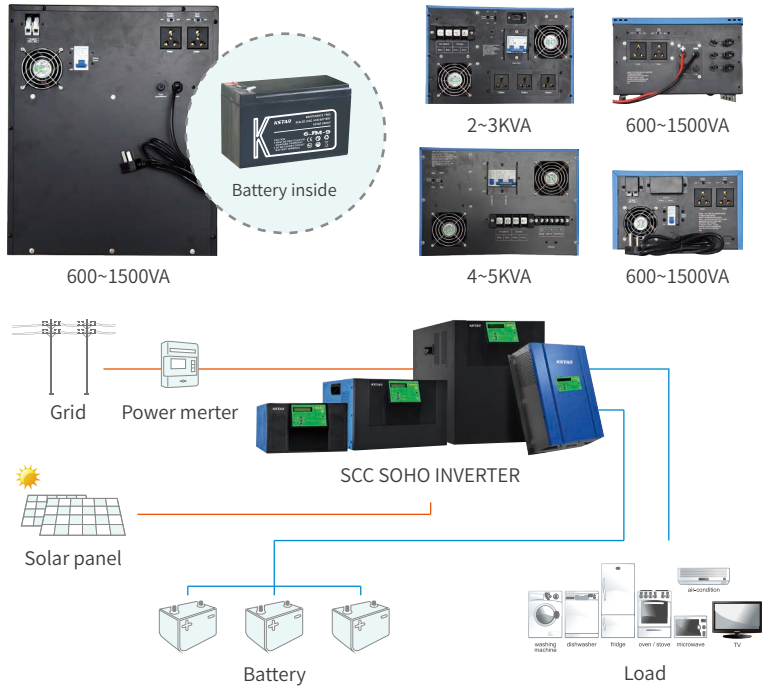
- High reliability system**

Advanced DSP digital automatic control technology to ensure the power durable and reliable
- Strong environment adaptability**

Wide input voltage and frequency rang avoid frequent switching  
High input frequency range,easy access to all kinds of generator  
Higher charging current,more setttable operation  
Intelligent charging managment,more accuracy charging current detection and more reasonable for extention battery lift time.  
Three steps charging mode
- Full display information**

LCD+LED display mode  
LED display:AC,PV,Inverter,output,fault,charge,battery low  
LCD display:input voltage,input frequency,output voltage,output frequency,battery voltage,  
Charing current is setttable in LCD  
Output voltage is friendly setttable in LCD panel
- Full protection function**

Inverter short circuit and overload protect function,  
Inverter wave current limited protection  
Inverter Battery over discharge protection  
Battery disconnected alarm protection



Technical Specifications

MODEL	ICILPV-600	ICILPV-800	ICILPV-1000	ICILPV-1500	ICILPV-2000	ICILPV-3000	ICILPV-4000	ICILPV-5000	ICILPV-6000
Capacity (VA/W)	600VA/480W	800VA/640W	1000VA/800W	1500VA/1200W	2000VA/1600W	3000VA/2400W	4000VA/3200W	5000VA/4000W	6000VA/4800W
LINE MODE									
INPUT									
Nominal voltage	220Vac(L+N+PE)								
Nominal frequency	50Hz								
Operating voltage range	INV: 120~300Vac UPS: 145~285Vac						INV: 160~265Vac UPS: 190~260Vac		
Operating Frequency range	38~70Hz								
OUTPUT									
Output voltage	INV: 205~245Vac UPS: 170~255Vac						INV: 160~265Vac UPS: 190~260Vac		
Power factor	0.8								
Harmonic distortion(THDV)	≤3%								
Frequency range	Same as Mains								
Waveform	Tracking mains								
Efficiency	≥94% (full load)						≥97% (full load)		
Transfer Time	10ms Max(5ms typical)								
Overload capacity	≤120%: 3min; ≤130%: 30s; >130%: shutdown immediately								
Scoket	IEC/Schuko						Terminal		
Battery Mode									
Battery Voltage	12Vdc	24Vdc		24/48Vdc		48Vdc			
Output Voltage	220Vac±5%				220/230Vac±1%				
Frequency Range	50±1Hz				50/60±0.5Hz				
Waveform(Mains.mode)	Pure sinewave								
Efficiency	≥82% (full load)						≥85% (full load)		
Overload capacity	≤110%: 10s; >110%: shutdown immediately								
AC CHARGER									
Charging Algorithhm	'3-Step charing								
Maximum Charging Current	10/20A selectable				10/20/30A selectable		10/20/30/40/50A selectable		
Constant current charging voltage	14.1±0.3V/cell								
Floating Charging Voltage	13.8±0.3V/cell								
SOLAR CHARGER									
Battery Voltage	12Vdc	24Vdc		24/48Vdc		48Vdc			
Maximum Charging Current	50A				50A/100A		100A		
Operating Voltage	15~18Vdc	30~36Vdc		30~36/60~72Vdc		60~72Vdc			
Minimum PV Voltage	9Vdc	18Vdc		18/36Vdc		36Vdc			
Maximum PV Array Open Circuit Voltage	45Vdc	65Vdc		65/85Vdc		85Vdc			
Floating Charging Voltage	13.8Vdc	27.6Vdc		27.6/55.2Vdc		55.2Vdc			
PROECTION									
Full Protection	Overload,over-temperature,short-circuit protectio,over-voltage,abnormal output voltage								
ALARM									
Battery Mode	Beep 1 time/10s,mute after 3min								
Battery Low	Beep 2 times/1s								
Overload	Beep 1 time/2s,4 times in row								
Fault	Continuously beeping								
PHYSICAL									
Dimension W x D x H (mm)	295x397x187				392x440x266		418x500x286		
Net weight (kg)	14	16	17	19	27	32	39	45	50
OPERATING ENVIRONMENT									
Humidity range	0~90%RH @0~40°C (Non condensing)								
Noise level	≤55dB at 1 Meter						≤58dB at 1 Meter		

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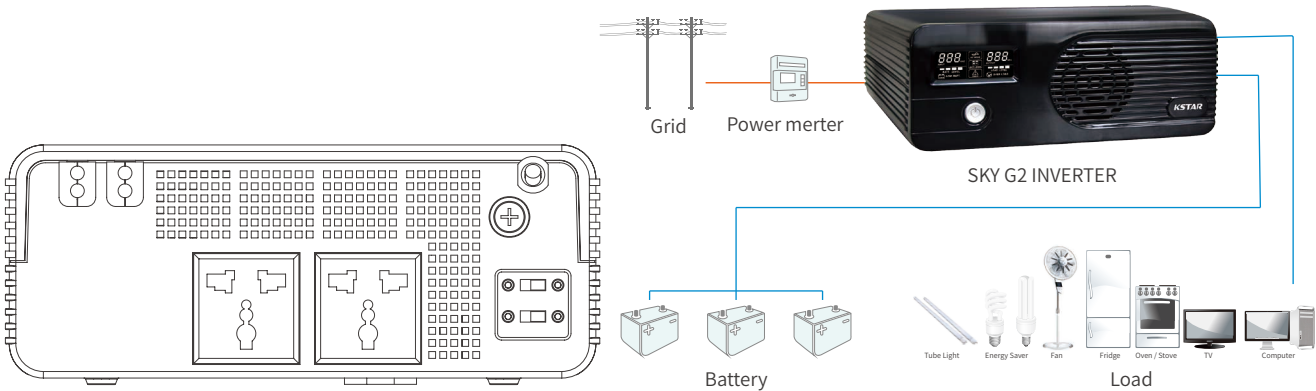
500VA~2000VA



Features:

- User selectable for accepting wide input voltage
  - Off mode charging function
  - Fast charging capacity.Max 10A or 20A of charging current for choice
  - 3 stage Intelligent charge control
  - Full protection function
- Auto restart function
  - LCD indicators and buzzer alarms
  - Rack-Tower design for flexible palcement
  - Compact size for convenient use and storage

Rear Panel:



Technical Specifications

MODEL NAME	SKY G2 700	SKY G2 1400
CAPACITY ( VA / W )	1000 / 700	2000 / 1400
INPUT		
Voltage Range		
Narrow Range Mode	170~280Vac	
Wide Range Mode	90~280Vac	
Frequency Range	50 / 60Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt.Mode)	230Vac ±10%	
Frequency Range(Batt.Mode)	50 / 60Hz ±1Hz	
Transfer Time	20 ms typical	
Waveform	Simulated Sine Wave	
BATTERY		
Battery Voltage	12V	24V
Charging Current	10A/20A	
PROTECTION		
Protection	Low battery alarm, low battery shutdown, over charge protection, overload protection, over temperature protection, short circuit protection	
ALARM		
Low Battery	Beep every second	
Overload	Beep every 0.5 second	
Fault	Continuous Beep	
OPERATING ENVIRONMENT		
Humidity	0-90% RH @ 0-50 °C (non-condensing)	
PHYSICAL		
Dimension (D×W×H) mm	310×239×93	
OTHERS		
AC input voltage range selection	Yes	
AC charging current selection	Yes	

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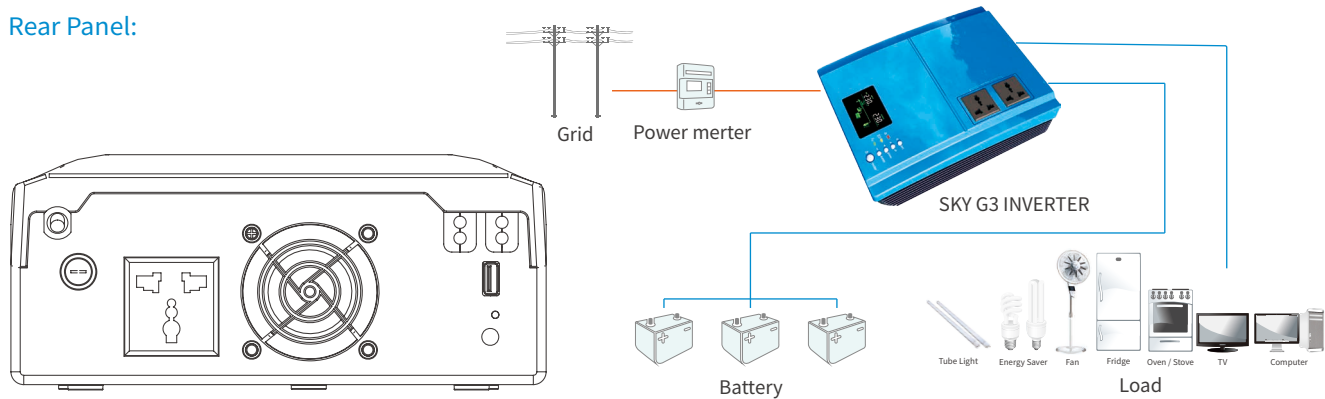
1000VA~2000VA



Features:

- User selectable for accepting wide input voltage
  - Off mode charging function
  - Fast charging capacity.Max 10A or 20A of charging current for choice
  - 3 stages Intelligent Charging Control
  - Full protection function
  - Auto restart function
- Fan speed automatic adjust with low noise
  - DC cut-off voltage setting
  - indicators and buzzer alarms
  - Rack-Tower design for flexible placement
  - Compact size for convenient use and storage
  - Buzzer mute control
- L o w
  - L C D

Rear Panel:



Technical Specifications

MODEL NAME	SKY G3 900	SKY G3 1600
CAPACITY ( VA / W)	1000 / 900	2000 / 1600
INPUT		
Voltage Range		
Narrow Range Mode	170~280Vac	
Wide Range Mode	90~280Vac	
Frequency Range	50 / 60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt.Mode)	230Vac ±10%	
Frequency Range(Batt.Mode)	50/60Hz ±1Hz	
Transfer Time	20 ms typical	
Waveform	Simulated Sine Wave	
BATTERY		
Battery Voltage	12V	24V
Charging Current	10A / 20A	
PROTECTION		
Protection	Low battery alarm, low battery shutdown, over charge protection, overload protection, over temperature protection, short circuit protection	
ALARM		
Low Battery	Beep every second	
Overload	Beep every 0.5 second	
Fault	Continuous Beep	
OPERATING ENVIRONMENT		
Humidity	0-90% RH @ 0-50 °C (non-condensing)	
PHYSICAL		
Dimension (D×W×H) mm	310×239×93	
OTHERS		
Built-in USB Charger (5V×1A max)	Optional	
AC input voltage range selection	Yes	
AC charging current selection	Yes	
Low DC cut-off voltage setting	Yes	
AC output rating voltage selection	Yes	
Buzzer mute control	Yes	
Battery Voltage & load percentage display	Yes	

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# SCC SKY INVERTER Series

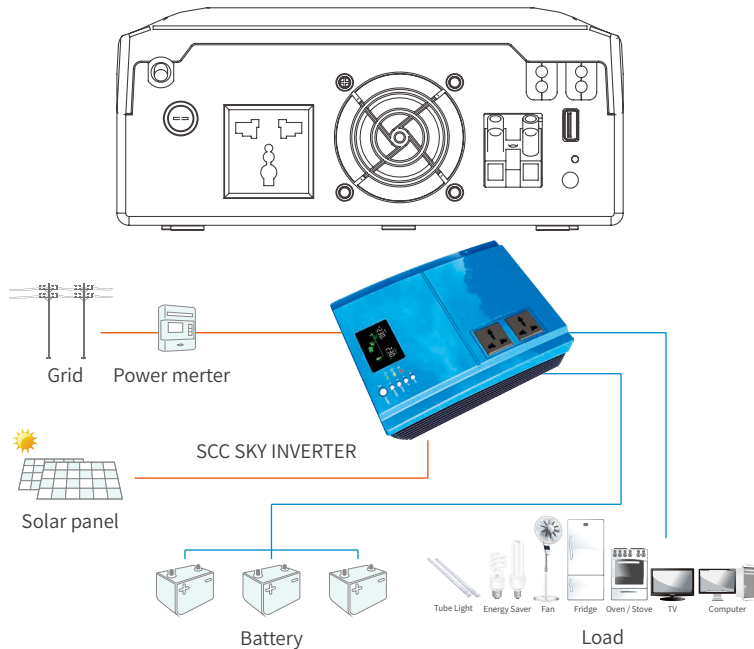
Off-grid solar rechargeable household inverter power supply  
2KVA / 1600W with 50A solar charger | 1KVA / 900W with 50A solar charger



### Features:

- High reliability system**
  - Advanced digital automatic control technology ensure the power durable and reliable;
- Strong environment adaptability**
  - Wide input voltage and frequency range avoid frequent switching;
  - 3 stages Intelligent Charging Control
  - Off mode charging function
- Full protection function**
  - Inverter short circuit and overload protection function Battery over discharge protection
  - The batteries will be disconnected and protected once fully charged.
  - Battery will be back discharge protection through solar PV panels.
  - Solar cell module, Battery polarity reverse connection circuit protection
  - Solar charge controller, inverter, and other internal short circuit protection.

### Rear Panel:



## Technical Specifications

Model	SCC SKY G3 900	SCC SKY G3 1600
CAPACITY ( VA / W )	1000 / 900	2000 / 1600
Nominal Battery Voltake (lead-acid battery)	12Vdc	24Vdc
LINE MODE		
INPUT		
Nominal Voltage	230Vac	
Voltage Range	170~280Vac (Narrow range) 90~280Vac (Wide range)	
Nominal Frequency	50Hz or 60Hz	
OUTPUT		
Voltage	230Vac	
Frequency / Waveform	Tracking the Utility	
Transfer Time	20ms Typical	
BACKUP MODE		
OUTPUT		
Voltage	220 / 230 / 240Vac	
Frequency	50Hz or 60Hz (Auto detection)	
Waveform	Simulated Sine Wave	
Protection	Low battery alarm, low battery shutdown, over charge protection, overload protection, over temperature protection, short circuit protection	
Battery charger (power by AC)		
Charging algorithm	3-steps charging	
AC charging mode	10A / 20A	10A / 20A
Floating charging voltage	13.75±0.25V	27.50±0.50V
Overcharging voltage	15.30V	30.60V
Solar battery charger		
MAX. input power	600W	1200W
Charging current (PWM)	50A	
System DC Voltage	12Vdc	24Vdc
Optimal work voltage range	15V~18V	30V~32V
MAX. PV input current	40V	60V
MAX. PV input current	50A	
GENERAL		
PHYSICAL		
Dimension (D×W×H) mm	316×227×92	
Net Weight (kg)	3.1	3.3
ENVIRONMENT		
Operating Environment	0~50°C, 0%~90% relative humidity (Non-condensing)	
Storage Environment	-15°C to 55°C, 0% to 90% humidity (Non-condensing)	
Noise Level	Less than 50dB	
Built-in USB Charger (5V×1A max)	Optional	
AC input voltage range selection	Yes	
AC charging current selection	Yes	
Low DC cut-off voltage setting	Yes	
AC output rating voltage selection	Yes	
Buzzer mute control	Yes	
Battery Voltage & load percentage display	Yes	

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## Green Earth, Our Common Family

As an enterprise citizen, Kstar fully understands that the environment will impact on enterprise's sustainable development and Human being's future living greatly. Therefore, products and services from KSTAR group are safe and environmental-friendly throughout all life cycle. With environmental responsibilities on shoulder, KSTAR supplies customer with ECO-Product, and provides staff with a healthy and safe working environment. In order to make greater contributes to the sustainable development of both enterprise and society, KSTAR commits itself to reduce environmental pollution by variety ways.

