SC-GT 3~160kVA Three-phase Hybrid Solar Inverter

Main Features:

★ Intelligent design, simple structure, powerful control functions, stable performance, safe and reliable.

★ Transfer efficiency up to 99%, saving 30%~60% solar panels compared with traditional controllers.

★ Lifelong service of on-line upgrade.

★ Famous brand components, able to resist high temperature over 105℃, 10 years design life theoretically.

★ Wide input working voltage range of solar panels.

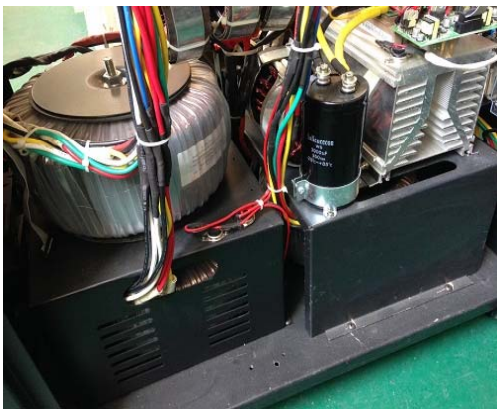
★ LCD/LED displays: model, PV input voltage, type of battery, battery voltage, charging current, charging power, and charging status, etc.

★ Reverse charging avoidable with solar energy, when the light is weak, e.g. in the night, the voltage of the battery may be higher than the terminal voltage of the solar arrays, but this controller is designed with the anti-reverse charging circuit to prevent the battery from reversely charging the solar cell.

★ The battery and the equipment can be effectively protected due to the broken circuit caused by the fuse in the controller circuit, although reverse connection occurs, which is equal to short circuit and can result in a large instantaneous current.

★ Automatic cutting off the circuit by the overload protection controller,

UNCOVERED ILLUSTRATION



3 x Toroidal Transfor

50-300A MPPT

Full-functional Graphical LCD/ LED(optional)

Front View

Connection Port

IGBT Full-bridge

Rear View

Technical Parameters

Model: SC-GT	3~5kVA	6~10kVA	15~25~30kVA	40~50~60kVA	80~100~120~160KVA
Phase System	3-phase in,3-phase out				
Power Factor	0.8 PF				
Display	Full-function graphical LCD/LED display				
PV INPUT					
Max Input Voltage	170Vdc	280Vdc	420Vdc	790Vdc	
Max Input Current	33A~55A		41A~55A~83A	55A~69A~83A	110A~138A~166A~220A
AC POWER INPUT					
Input Connections	3-phase 4-wire + Safety Grounding Wire				
Input Voltage Range	-15% < 380/400/415V < +15%				
Input Frequency Range	45Hz~65Hz				
AC Charging Current	0-50A				
SOLAR CHARGING CONTROLLER					
Type	MPPT				
Input Voltage Range	65~144Vdc	110~220Vdc	220~360Vdc	440~680Vdc	
Max Charging Current	50A	50~100A	50~150A	50~300A	
Protection	High/low voltage, overload, over-temperature, short-circuit, anti-reverse connection				
OUTPUT					
Voltage	L-L:380/400/415V ± 5%(battery mode); 380/400/415V ± 15%(utility mode) L-N:220V/230V/240V				
Current	250A max				
Frequency	50/60Hz ± 0.5%				
Efficiency	> 99% (Utility mode); > 80% (Invertion mode)				
Transfer Time	≤1.5ms				
Wave Distortion	When the load varies from 0 to 100%, the voltage variation <3%				
Wave Type	Pure sine wave				
THD	<3% (linear load); <10% (non-linear load)				
BATTERY					
Type	Maintenance free lead-acid battery, other type is available				
Voltage	48Vdc	96Vdc	192Vdc	384Vdc	
Balanced Charging Voltage	56-56.8Vdc	112-113.6Vdc	224-227.2Vdc	448-454.4Vdc	
Float Charging Voltage	55Vdc	110Vdc	220Vdc	440Vdc	

Technical Parameters

PROTECTION				
Overload	Battery mode: ≥110%, 30s shutoff; ≥120%, 2s shutoff. Utility mode: won't shut off, but buzz to alarm.			
Short-circuit	Alarm in 20s, then closing the inverter			
High Input Voltage	Available			
Low Input Voltage	Available			
Battery Reverse Polarity	Available			
High-temperature	Available			
SYSTEM and ENVIRONMENT				
Communication Interface	RS232/RS485(optional)			
Heat-dissipating Method	Cooling fan			
Noise	<45db(lm)			
Working Temperature	0~40℃			
Working Humidity	20%~90% (non-condensing)			
Protection Grade	IP20			
	MECHANICAL SPECIFICATIONS			
DimensionWxHxD(mm)	595*286*765	710*386*865	700*445*1110	1000*600*1350
Weight(kgs)	60-70	100-200	250-400	500-650
COMMUNICATION FUNCTION				
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8, Linux, Unix and MAC			
SNMP Optional	Power management from SNMP supervisor and web browser			

★ SCPOWER is dedicated to technology innovation and always attemps to deliver to customers the best products and services, therefore, all specifications subject to change, please consider real sample as final.

★ THD = Total Harmonic Distortion