

THUNDERVOLT POWER 3 PHASE INVERTER/CHARGER

MODEL EV-SGT

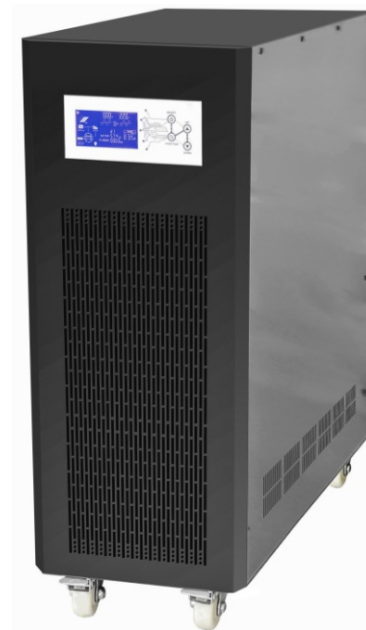
SGT Three Phase Inverter Charger/Hybrid Solar Inverter

Feature

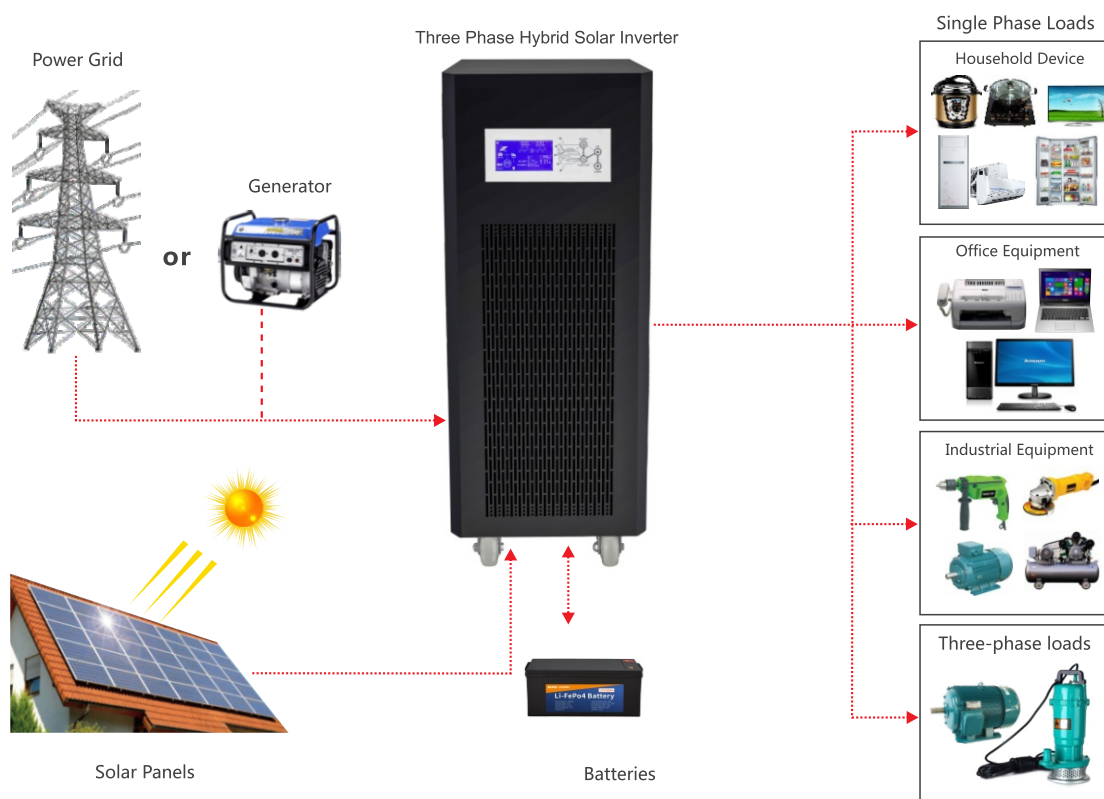
- Pure sine wave output;
- Low DC voltage, saving system cost;
- Built-in PWM or MPPT charge controller;
- AC charge current 0-45A adjustable ;
- Wide LCD screen, clearly and precisely shows icon data;
- 100% imbalance loading design, 3 times peak power.;
- Setting different working modes based on variable usage requirements ;
- VVarious communication ports and Remote monitoring RS232/RS485/APP(WIFI/GPRS) (Optional).

Application Area

- Medium IDC data exchange center machine room, medium scale network management system, billing center, bank/securities settlement center, industrial process control applications, traffic control areas etc.
- Provide stable, reliable and safe solutions for families, islands, ships and other small photovoltaic power systems



System Application Diagram



Technical Parameters

Model:SGT		4KVA		6KVA		7KVA		8KVA		10KVA		15KVA		20KVA		25KVA			
Rated Power		3.2KW		4.8KW		5.6KW		6.4KW		8KW		12KW		16KW		20KW			
Peak Power(20ms)		9.6KW		14.4KW		16.8KW		19.2KW		24KW		36KW		48KW		60KW			
Start Motor		3HP		4HP		4HP		4HP		5HP		7HP		10HP		10HP			
Battery Voltage		48/96/192VDC										96/192/384VDC							
Built-in solar controller charging current (Optional)		PWM: 10A-60A(48V system); 50A/100A(96V system); 50A(192V system) MPPT: 10A-100A(48V system) ; 50A/100A(96V system)										PWM: 10A-60A(48Vsystem);50A/100A(96Vsystem);50A/100A(192Vsystem) MPPT:10A-100A(48Vsystem);50A/100A(96Vsystem)							
Size(L*W*Hmm)		565*300*775										725*365*1010							
Package Size(L*W*Hmm)		625*360*895										785*425*1135							
N.W.(kg)		65		73		75		80		112		134		160		176			
G.W.(kg)(Wooden Packing)		78		86		88		93		136		158		184		200			
Installation Method		Tower																	
Model:SGT		30KVA		40KVA		50KVA		60KVA		80KVA		100KVA		125KVA		150KVA		200KVA	
Rated Power		24KW		32KW		40KW		48KW		64KW		80KW		100KW		120KW		160KW	
Peak Power(20ms)		72KW		96KW		120KW		144KW		192KW		240KW		300KW		360KW		480KW	
Start Motor		15HP		15HP		20HP		25HP		30HP		40HP		50HP		60HP		80HP	
Battery Voltage		192/384VDC										384VDC							
Built-in solar controller charging current (Optional)		PWM: 100A-200A(192V/384 system) / MPPT: 50A/100A(192V/384 system)										PWM: 100A-200A / MPPT: 50A/100A							
Size(L*W*Hmm)		720*575*1275										875*720*1380						1123*900*1605	
Package Size(L*W*Hmm)		785*640*1400										980*825*1560						1185*960*1750	
N.W.(kg)		257		287		307		337		355		512		552		612		705	
G.W.(kg)(Wooden Packing)		290		320		340		370		388		552		592		652		755	
Installation Method		Tower																	
Input	DC Input Voltage Range	10.5-15VDC (Single battery voltage)																	
	AC Input Voltage Range	380Vac/400Vac±10%(customized 190Vac/200Vac)																	
	AC Input Frequency Range	45Hz~65Hz																	
	Max AC charging current	20A/10A/5A		20A/10A/5A		20A/10A/5A		25A/15A/10A		25A/15A/10A		30A/20A/10A		30A/20A/10A		45A/30A/15A			
	AC charging method	30A/15A	40A/20A	45A/25A	45A/30A	30A	45A	45A	45A	45A	45A	45A	45A	45A	45A	45A	45A		
Output	Phase	Three-stage (constant current, constant voltage, floating charge)																	
	Efficiency(Battery Mode)	≥85%																	
	Output Voltage(Battery Mode)	380Vac/400Vac±10%(customized 190Vac/200Vac)																	
	Output Frequency(Battery Mode)	50/60Hz±1%																	
	Output Wave(Battery Mode)	Pure Sine Wave																	
	Efficiency(AC Mode)	>99%																	
	Output Voltage(AC Mode)	Conforming to AC input																	
	Output Frequency(AC Mode)	Conforming to AC input																	
	Output waveform distortion(Battery Mode)	≤3% (Linear load)																	
	No load loss(Battery Mode)	≤1% rated power																	
	No load loss(AC Mode)	≤2% rated power(charger does not work in AC mode)																	
	No load loss(Energy saving Mode)	≤10W																	
Battery Type (Optional)	Phase	3/N/PE																	
	U0: Gel U.S.A	Charge Voltage : 14V ; Float Voltage : 13.7V (Single battery voltage)																	
	U1: A.G.M.1	Charge Voltage : 14.1V ; Float Voltage : 13.4V (Single battery voltage)																	
	U2: A.G.M.2	Charge Voltage : 14.6V ; Float Voltage : 13.7V (Single battery voltage)																	
	U3: Sealed lead Acid	Charge Voltage : 14.4V ; Float Voltage : 13.6V (Single battery voltage)																	
	U4: Gel European	Charge Voltage : 14.4V ; Float Voltage : 13.8V (Single battery voltage)																	
	U5: Open lead Acid	Charge Voltage : 14.8V ; Float Voltage : 13.5V (Single battery voltage)																	
	U6: Calcuim(open)	Charge Voltage : 15.1V ; Float Voltage : 13.6V (Single battery voltage)																	
	U7: Sulphation cycle	15.5V for 4hrs																	
	Customize Battery	Charge and discharge parameters of different types of batteries (such as lithium batteries, etc.) can be customized according to user requirements.																	
Protection	Battery undervoltage alarm	11V (Single battery voltage)																	
	Battery undervoltage protection	10.5V (Single battery voltage)																	
	Battery overvoltage alarm	15V (Single battery voltage)																	
	Battery overvoltage protection	17V (Single battery voltage)																	
	Battery overvoltage recovery voltage	14.5V (Single battery voltage)																	
	Overload power protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)																	
	Inverter output short circuit protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)																	
	Temperature protection	>90°C (Shut down output)																	
Alarm	A	Normal working condition, buzzer has no alarm sound																	
	B	Buzzer sounds 4 times per second when battery failure, voltage abnormality, overload protection																	
	C	When the machine is turned on for the first time, the buzzer will prompt 5 when the machine is normal																	
Inside Solar controller (Optional)	Charging Mode	MPPT or PWM																	
	Charging current	PWM: 10A/20A/30A/40A/50A/60A(48V system); 50A/100A/150A/200A(96V/192V/384V system) MPPT: 10A/20A/30A/40A/50A/60A/80A/100A(48V system); 50A/100A(96V/192V/384V system)																	
	PV Input Voltage Range	PWM: 60V-88V(48V system); 120V-176V(96V system); 240V-352V(192V system); 480V-704V(384V system) MPPT: 60V-120V(48V system); 120V-240V(96V system); 240V-360V(192V system); 480V-640V(384V system)																	
	Max PV Input Voltage(At 25°C)	PWM: 100V(48V system); 200V(96V system); 400V(192V system); 750V(384V system) MPPT: 150V(48 system); 300V(96V system); 450V(192V system); 750V(384V system)																	
	PV Array Maximum Power	48V system: 560W/1120W/1680W/2240W/2800W/3360W/4480W/5600W; 96V system: (PWM: 5.6KW/11.2KW) / (MPPT: 5.6KW/5.6KW*2); 192V system: (PWM: 11.2KW/22.4KW/16.8KW*2/22.4KW*2) / (MPPT: 11.2KW/11.2KW*2); 384V system: (PWM: 22.4KW/44.8KW/33.6KW*2/44.8KW*2) / (MPPT: 22.4KW/22.4KW*2)																	
	Standby loss	≤3W																	
	Maximum conversion efficiency	>95%																	
Working Mode		Battery First/AC First/Saving Energy Mode																	
Transfer Time		≤4ms																	
Display		LCD																	
Thermal method		Cooling fan in intelligent control																	
Communication(Optional)		RS232/RS485/APP (WIFI/GPRS)																	
Environment	Operating temperature	-10℃ ~40℃																	
	Storage temperature	-15℃ ~60℃																	
	Noise	≤65dB																	
	Elevation	2000m (More than derating)																	
	Humidity	0%~95% (No condensation)																	
Warranty		1 year																	

Note: 1. Specifications are subject to change without prior notice; 2. Special voltage and power requirements can be customized according to the actual situation of users.