



HYBRID INVERTER

series Single-phase

Product introduction

The series is a new all-in-one solar charge inverter, which integrates solar energy storage & utility charging energy storage and AC sine wave output. Thanks to DSP control and advanced control algorithm, it has high response speed, high reliability and high industrial standard. Four charging modes are optional, i.e. Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging; and two output prior are available to meet different application requirements.

Performance characteristics

High energy conversion efficiency Hight charging and inversion efficiency, low loss and energy saving.
Four charging modes Mains priority charging, solar priority charging, mains solar hybrid charging and solar only charging.
Emergency function Support battery-free output, only PV start and loading, with battery activation function.
The host computer and the APP cloud communication The host computer and the APP cloud can display the operating data and status of the system in real time and control and modify the parameters.
Parallel function It can be flexibly combined to achieve up to 9 parallel machines, and the parallel system can output single-phase and three-phase AC voltage.
Protection function Perfect hardware and software protection function, can display the fault type for easy removal.
Timed charging and discharging function Allowing for segmented charging and discharging at different times.

Technical parameters

MODEL	GST48-3.5K-P1	GST48-6.6K-P1	GST48-8.5K-P1	GST48-10.5K-P1	GST48-12.5K-P1
INVERTER OUTPUT					
Rated output power (W)	3500	6600	8500	10500	12500
Rated output power (VA)	3500	6600	8500	10500	12500
Maximum Peak Power (W)	6000	12000	13000	16000	19000
Load Capacity with Motors (HP)	2	4	5	6	7
Rated AC Output	230 VAC (200 / 208 / 220 / 240VAC), 50 / 60Hz				
Output Voltage Waveform	Pure Sine Wave				
Inverter and Bypass Switching Time	10ms (typical)				
Parallel Capacity	9				
Maximum Battery Inverter Efficiency	93%				
Overload Protection	102%~110%, 5min; 110%~125%, 10s; >125%, 5s				
BATTERY					
Battery Type	Lithium / Lead-acid / User Defined				
Rated Battery Voltage (VDC)	48				
Battery Voltage Range (VDC)	40~60				
Max.MPPT Charging Current (A)	60	120	200	220	240
Max.Mains Charging Current (A)	60	60	100	120	120
Max.Hybrid Charging Current (A)	80	120	200	220	240
Charging current error (ADC)	±3				
Charging Short Circuit protection	Blown Fuse				
PV CHARGING					
MPPT Quantity	1		2		
Max. PV array power (W)	4000	6600	6600+6600		
Max. PV input current (A)	15	22	22+22		
Max. Open Circuit Voltage (VAC)	500		500+500		
MPPT Voltage Range (VDC)	120~450				
MPPT Tracking Efficiency	99.9%				
MAINS INPUT					
Input Voltage Range (VAC)	90~280/170~280				
Frequency Range (Hz)	50/60±0.3				
Input Short Circuit Protection	Circuit breaker				
Bypass Overload Current (A)	30	40	63		
SPECIFICATIONS					
Dimensions (D*W*H)mm	130*350*455		130*445*630		
Weight (kg)	11	12	27		
Classification of waterproof	IP20				
Operating Temperature Range (°C)	-10~55				
Storage Temperature Range (°C)	-25~60				
Noise (dB)	<60				
Heat Dissipation	Forced air cooling (variable speed of fan)				
COMMUNICATION					
Embedded interface	RS485 / CAN / USB / Dry contact				
External module	WIFI/4G				
CERTIFICATION					
Safety	CE(IEC62109-1)				
EMC	EN61000				