

ISH6K48EA-G1

6kW Bidirectional Energy Storage Inverter



Introduction

ISH6K48EA-G1 bidirectional energy storage inverter can be connected to photovoltaic and energy storage systems to achieve on-grid and off-grid functions, bidirectional intelligent energy control, and energy scheduling. It has uninterruptible power supply (UPS) function with 10 ms switching time, and supports DC flashover protection.

Main Features



Protection class: IP65



DC flashover protection



Maximum 1.5 times DC oversizing



Maximum photovoltaic inversion efficiency: 98.4%



Seamless UPS function with less than 10ms switching time

Application

- Solar power generation to save electricity costs
- Peak load shifting to make profits from electricity price differences
- Serves as an emergency backup power supply to protect important household equipment

Technical Parameters

Models

	ISH5K48EA-G1	ISH6K48EA-G2
Photovoltaic Input Data		
	5kW	6kW
Maximum photovoltaic input power (W)	7500	9000
Maximum DC voltage (V)		550
Start-up voltage (V)		90
Rated voltage (V)		360
MPPT operating voltage range (V)		80~550
Number of MPPTs		2
Number of strings per MPPT		1
Maximum input current per MPPT (A)		16
Maximum short-circuit current per MPPT (A)		23
On-grid Output Data		
Rated power	5000W	6000W
Maximum apparent power	5000VA	6000VA
Rated voltage (Vac)		230
Rated frequency (Hz)		50/60 (45Hz~55Hz/55Hz~65Hz)
Maximum output current (A)	22.7	27.3
Power factor		1 (0.8 leading...0.8 lagging)
Total current waveform distortion rate		<3%
Battery Input Data		
Battery type		Lithium-ion battery
Rated battery voltage (V)		48
Battery voltage range (V)		40~60
Maximum charge/discharge current (A)	100	120
Maximum charge/discharge power (W)	5000	6000
Backup Power Data		
Maximum apparent power (VA)	5000	6000
Maximum output current (A)	22.7	27.3
Rated voltage (V)		230
Rated frequency (Hz)		50/60Hz
Total voltage waveform distortion rate		<3%
Efficiency		
Maximum efficiency		98.4%
European efficiency		98%
Maximum battery charge/discharge efficiency		96%
MPPT efficiency		99.9%
Protection Function		
Insulation impedance detection		Available
Residual current detection		Available
Input reverse connection protection		Available
Anti-islanding protection		Available
AC short circuit protection		Available
DC switch		Available
DC surge protection		Available
AC surge protection		Available
DC flashover protection		Optional
Basic Parameters		
Operating temperature		-25~+60°C
Relative humidity		0~95%
Cooling method		Natural cooling
Topology		Transformer-free design
Maximum operating altitude (m)		2000
Human-machine interaction		LED, WLAN+APP
BMS communication method		CAN/RS485
Electric meter communication method		RS485
Monitoring method		BT/Wi-Fi/GPRS
Weight (kg)		20
Dimensions (mm)		460(width)/410(height)/150(depth)
Nighttime self-consumption power (W)		<10