

Residential Energy Storage Inverters

Three Phase ESS Hybrid Inverter



Product Features:

Safe & Reliable

- With island protection, PV reverse polarity protection, battery reverse polarity protection, insulation monitoring, residual current monitoring, AC over current protection, AC power protection, short circuit protection.

Friendly & Flexible

- Less noise due to no external cooling fans;
- Support diesel generator access;
- Support full power discharge, automatic management of battery charge and discharge.

Economical & Practical

- It is more economical to support multiple operating modes;
- Can be as a UPS for the important loads when power off.

General Data

Model	S6KH3	S8KH3	S10KH3	S12KH3	S15KH3
Ingress Protection	IP65				
Operating Temperature Range	-35~60°C				
Relative Humidity	0~100%				
Operating Altitude	4000m(Derating above 2000 m)				
Cooling	Natural Convection				
Noise Emission	≤25dB				
Installation	Wall Mounted				
EMC	IEC/EN 61000-6-1:2019, IEC/EN 61000-6-2:2019, IEC/EN 61000-6-3:2021, IEN/EN 61000-6-4:2019, IEC/EN 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021, IEC/EN 61000-3-11:2019, EN 61000-3-12:2011				
Grid Regulation	Europe: EN 50549-1:2019/AC:2019, Poland:EN50549-1:2019/Rfg:2016/NC Rfg:2018/PTPiREE:2021, Germany:VDE-AR-N 4105:2018 /DIN VDE V 0124-100(VDE V 0124-100):2020, South Africa:NRS 097-2-1:2017 Edition 2.1, UK:G99/1-6:2020, Spain:UNE217001:2020 /UNE217002:2020/NTS V2.1:2021-07, IEC61727:2004/IEC62116:2014/IEC61683:1999, Hungary:EN50549-1:2019/RFG:2016/Hungary				
Safety Regulation	IEC/EN62109-1:2010, IEC/EN62109-2:2011				

Interface

Model	
HMI	LCD;APP
BMS	RS485,CAN
EMS	RS485
Meter	RS485
Supported Communication Interface	WIFI / GPRS / 4G

Battery

Model	S6KH3	S8KH3	S10KH3	S12KH3	S15KH3
Max.Charging/Discharging Power	6600W	8800W	11000W	13200W	16500W
Battery Voltage Range	125-600V				
Battery Working Voltage Range	150-550V				
Max.Charging/Discharging Current	50A				
Rated.Charging/Discharging Current	40A				
Battery Type	Lithium and Lead Acid Battery				

Input DC (PV)

Model	S6KH3	S8KH3	S10KH3	S12KH3	S15KH3
Max.PV Input Power	9000W	12000W	15000W	18000W	22500W
Max. PV Voltage	1000V				
MPPT Voltage Range	180-850V				
Full Power MPPT Voltage Range	250V-850V	330V-850V	430V-850V	510V-850V	620V-850V
Start-up Voltage	125V				
Max.Input Current per MPPT	13/13A	13/13A	13/13A	13/13A	20/20A
Max. Short-circuit Current	16/16A	16/16A	16/16A	16/16A	30/30A
Number of MPP Trackers	2				
MPPT Number/ Max. Input Strings Number	1/1	1/1	1/1	1/1	2/2
Rated Input Voltage	600V				

AC Output Data(On-Grid)

Model	S6KH3	S8KH3	S10KH3	S12KH3	S15KH3
Nominal Output Power to Grid	6000VA	8000VA	10000VA	12000VA	15000VA
Max. Apparent Power to Grid	6600VA	8800VA	11000VA	13200VA	16500VA
Max. Apparent Power from Grid	13200VA	17600VA	22000VA	26400VA	33000VA
Max. Apparent Current from Grid	19.1A	25A	31.8A	38.1A	47.6A
Nominal Output Current to Grid	8.7A	11.5A	14.4A	17.3A	21.7A
Max.Output Current to Grid	9.5A	12.7A	15.9A	19.1A	23.8A
Nominal Grid Voltage	380V/400V, 3W+N+PE				
Nominal Grid Frequency	50Hz/60Hz				
THDI	<2%				

AC Output Data(Back Up)

Model	S6KH3	S8KH3	S10KH3	S12KH3	S15KH3
Nominal Output Power	8000VA	8000VA	10000VA	12000VA	15000VA
Max. Apparent Power	8800VA	8800VA	11000VA	13200VA	16500VA
Nominal Output Current	8.7A	11.5A	14.4A	17.3A	21.7A
Max.Output Current	9.5A	12.7A	15.9A	19.1A	23.8A
Nominal Output Voltage	400V,3W+N+PE				
Nominal Output Frequency	50Hz/60Hz				
THDu	<2%				
Max.Efficiency	97.9%	97.9%	98.2%	98.2%	98.5%
Europe Efficiency	97.2%	97.2%	97.5%	97.5%	97.6%
MPPT Efficiency	99.9%				
Max.Battery Charge/ Discharge Efficiency	97.5%	97.5%	97.5%	97.6%	97.8%

Mechanical Parameters

Model	S6KH3	S8KH3	S10KH3	S12KH3	S15KH3
Dimensions (W*H*D)	530*560*220mm				
Weight	30kg	30kg	31kg	32kg	34kg