

Single phase hybrid inverter 3kW to 6kW

Models:

AH-3KSL-G2 AH-4.6KSL-G2
 AH-3.6KSL-G2 AH-5KSL-G2
 AH-4KSL-G2 AH-6KSL-G2



Easy-to-install

- Easy installation with full quick plug connector
- Compact wall mount design
- Compatible with low - voltage batteries from leading suppliers



Reliable

- Up to 180 % PV array oversizing for higher yields
- Max. 16A input current, ideal for bifacial and large PV modules
- IP65 rated design for outdoor use



User-friendly

- Setup, commissioning and monitoring via the HaiSolar app
- Intelligent work modes and customisable battery management for DOD / Time of Use / Power setting

Technical DataSheet

	AH-3KSL-G2	AH-3.6KSL-G2	AH-4KSL-G2	AH-4.6KSL-G2	AH-5KSL-G2	AH-6KSL-G2
Input data(PV)						
Max. recommended PV power(for module STC)	6000W	7200W	8000W	9200W	10000W	10800W
Max. DC voltage	550V	550V	550V	550V	550V	550V
Start voltage	120V	120V	120V	120V	120V	120V
Nominal voltage	360V	360V	360V	360V	360V	360V
MPP work voltage range	90V-550V	90V-550V	90V-550V	90V-550V	90V-550V	90V-550V
Number of independent MPP tracker	2	2	2	2	2	2
No. of PV strings per MPP tracker	1	1	1	1	1	1
Max. input current per MPP tracker	16A	16A	16A	16A	16A	16A
Max. short-circuit current per MPP tracker	20A	20A	20A	20A	20A	20A
Output (AC)						
AC nominal power	3000W	3680W	4000W	4600W	5000W	6000W
Max. AC apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Nominal AC voltage/range	230V ; 180Vac-270Vac					
AC grid frequency/range	50/60, ±5Hz					
Max. output current	16A	16A	22A	22A	27A	27A
Phase factor at rate power	1	1	1	1	1	1
Displacement power factor, configurable*	0.8leading...0.8lagging					
THDI	<3%	<3%	<3%	<3%	<3%	<3%
AC connection	Single phase					
Stand alone(AC power)						
AC nominal output power	3000W	3600VA	4000VA	4600VA	5000VA	6000VA
Max. AC apparent power	3600VA	4320VA	4800VA	5520VA	6000VA	6600VA/60S
Nominal AC voltage	230V	230V	230V	230V	230V	230V
Nominal AC frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Max. output current	16A	16A	22A	22A	27A	27A
THDv	0.03	0.03	0.03	0.03	0.03	0.03
BAT data (DC)						
Battery voltage range	42~59V	42~59V	42~59V	42~59V	42~59V	42~59V
Recommended battery voltage	52V	52V	52V	52V	52V	52V
Minimum full load voltage	45V	45V	46V	46V	50V	50V
Max. charging / discharging current	66.7A/66.7A	80A/80A	87A/87A	100A/100A	100A/100A	120A/120A
Continuous charging / discharging power	3000W	3600W	4000W	4600W	5000W	6000W
Type of battery	lithium ion battery					
Efficiency						
Max. efficiency	0.972	0.972	0.973	0.974	0.975	0.976
Euro weighted efficiency	0.97	0.97	0.971	0.971	0.972	0.972
MPPT efficiency	≥99.5%	≥99.5%	≥99.5%	≥99.5%	≥99.5%	≥99.5%
Protection devices						
DC reverse polarity protection	yes	yes	yes	yes	yes	yes
DC switch	yes	yes	yes	yes	yes	yes
DC Surge protection	yes	yes	yes	yes	yes	yes
Insulation resistance monitoring	yes	yes	yes	yes	yes	yes
AC surge protection	yes	yes	yes	yes	yes	yes
AC short-circuit protection	yes	yes	yes	yes	yes	yes
Ground fault monitoring	yes	yes	yes	yes	yes	yes
Grid monitoring	yes	yes	yes	yes	yes	yes
Anti-islanding protection	yes	yes	yes	yes	yes	yes
Residual-current monitoring unit	yes	yes	yes	yes	yes	yes
General Data						
Dimensions (W / H / D) in mm	550*500*185					
Weight	28KG	28KG	28KG	28KG	28KG	28KG
Operating temperature range	-25°C ~+60°C (-13~+140°F) with derating above 45°C~113°F					
Noise emission (typical)	≤ 25 dB(A)	≤ 25 dB(A)	≤ 25 dB(A)	≤ 25 dB(A)	≤ 25 dB(A)	≤ 25 dB(A)
Altitude	4000m	4000m	4000m	4000m	4000m	4000m
Self-Consumption	< 10 W	< 10 W	< 10 W	< 10 W	< 10 W	< 10 W
Cooling concept	Natural	Natural	Natural	Natural	Natural	Natural
Environmental Protection Rating	IP65	IP65	IP65	IP65	IP65	IP65
Relative humidity	1	1	1	1	1	1
Features						
DC connection	MC4/H4(opt)					
AC connection	connector	connector	connector	connector	connector	connector
BAT connection	connector	connector	connector	connector	connector	connector
Display	LED&APP	LED&APP	LED&APP	LED&APP	LED&APP	LED&APP
Interfaces: RS485/ USB /CAN/Wi-Fi/GPRS	yes /yes /yes/opt/opt					
Warranty: 5 years / 10 years	yes /opt	yes /opt	yes /opt	yes /opt	yes /opt	yes /opt
Certificates and approvals	VDE4105 / AS4777 / EN50549 / CEI 0-21 / G98 / G99 / G100					