

LOW VOLTAGE RESIDENTIAL SERIES

AU3-6KESL-G3 SINGLE-PHASE HYBRID INVERTER



High Performance

- Double MPPT design
- 150% DC oversizing capability
- 125V startup voltage
- Max. efficiency up to 97.60%



Stable and Reliable Operation

- Transfer time < 10 ms
- Max. charge/discharge current up to 135A
- 200% overload capacity for 20 seconds in off-grid mode



Flexible System Design

- Supports AC coupling retrofit
- Up to 6 units in parallel
- Generator compatible



2times
Up to
times input



97.6%
Max
efficiency



IP66
ingress
protection



<10ms
EPS
switch time

Technical Specification

		AU3KESL-G3	AU3.6KESL-G3	AU4KESL-G3	AU5KESL-G3	AU6KESL-G3
PV INPUT						
Max. DC Input Power	[W]	6000	7200	8000	10000	12000
Max. DC Input Voltage	[V]			500		
Start-Up Voltage	[V]			125		
MPPT Voltage Range	[V]			150-425		
Nominal Input Voltage	[V]			370		
Max. Input Short-Circuit Current	[A]	23		23+23		
Max. Operating PV Input Current	[A]	18		18+18		
Number Of MPP Trackers		1		2		
Strings Per MPP Tracker		1		1+1		
AC INPUT/OUTPUT DATA						
Nominal AC Input/Output Power	[W]	3000	3600	4000	5000	6000
Max. Input/Output Apparent Power	[VA]	3300	3960	4400	5500	6600
Max. AC Input/Output Current	[A]	26.1/14.3	31.3/16.0	34.8/19.1	43.5/23.9	43.5/28.7
Nominal AC Output Current	[A]	13.0	16	17.4	21.7	26.1
Output Voltage	[V]			220/230/240		
AC Input Voltage Range	[V]			80-300		
Nominal Grid Frequency	[Hz]			50/60		
THDi (Rated Power)	[%]			<3		
Displacement Power Factor				0.8 leading ~0.8 lagging		
BATTERY PARAMETERS						
Battery Type				Lead-acid or Lithium-ion		
Voltage Range	[V]			40-60		
Max. Charge/Discharge Current	[A]	75	90	100	120	135
Number of Battery Input				1		
Charging Strategy for Li-ion Battery				Self-adaption to BMS		
EQUIPMENT PROTECTION						
Integrated		DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, DC Terminal Insulation Impedance Monitoring, Dc Component Monitoring, Ground Fault Current Monitoring, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC input Switch Overvoltage Load Drop Protection, Residual Current Detection (RCD), Surge protection level, Ground fault circuit interrupter (GFCI)				
Surge Protection Level		TYPE II(DC), TYPE II(AC)				
EPS (OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)						
Nominal Output Power	[W]	3000	3600	4000	5000	6000
Peak Apparent Power	[VA]	6000(20s)	7200(20s)	8000(20s)	10000(20s)	12000(20s)
Max. Continuous Current	[A]	13	15.7	17.4	21.7	26.1
Continuous Voltage	[V]			230		
Nominal Grid Frequency	[Hz]			50/60		
Switch Time	[ms]			<10		
Parallel Operation				Yes		
SYSTEM DATA						
Max. Efficiency	[%]			97.6		
MPPT Efficiency	[%]			>99		
Euro. Efficiency	[%]			96.5		
Ingress Protection				IP66		
Operating Temperature Range	[°C]			-40~+60 (Derating above +45)		
Max. Operating Altitude	[m]			<3000		
Typical Noise Emission	[dB]			<30		
Storage Temperature Range	[°C]			-40~+65		
Over Voltage Category				OVC II(DC), OVC III(AC)		
Dimensions (W×H×D)	[mm]			384*450*227		
Net Weight	[kg]			18		
Cooling Type				Natural		
Communication Interfaces				RS485/CAN/WiFi/LAN&4G (Optional)		
AFCI Fault Protection				Optional		
STANDARD						
Safety Standard/EMC Standard		EN IEC 61000-6-3:2021 EN IEC 61000-6-2:2019 EN 61000-3-12:2011/A1:2024 EN IEC 61000-3-11:2019 IEC 62109-1:2010, IEC 62109-2:2011				
Grid-Connected Standard		EN 50549-1:2019+A1:2023 EN 50549-10:2022 EN 50549-1_A				
Compatible Batteries		Pylontech;Austa				