

LOW VOLTAGE RESIDENTIAL SERIES

AU7-10KESL-G3 SINGLE-PHASE HYBRID INVERTER



High Performance

- Max. efficiency up to 97.6%
- 125 V startup voltage
- 150% DC oversizing supported
- Max. string input current up to 18 A



Stable and Reliable Operation

- IP66 protection rating
- 200% backup overload capability
- Automatic transfer time < 10 ms



Flexible System Design

- Up to 6 units in parallel



2times
Up to
times input



97.6%
Max
efficiency



IP66
ingress
protection



<10ms
EPS
switch time

Technical Specification

		AU7KESL-G3	AU7.6KESL-G3	AU8KESL-G3	AU10KESL-G3
PV INPUT					
Max. DC Input Power	[W]	14000	15200	16000	20000
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]		34+34		
Max. Operating PV Input Current	[A]		28+28		
Number Of MPP Trackers			2		
Strings Per MPP Tracker			2+2		
AC INPUT/OUTPUT DATA					
Nominal AC Output Power	[W]	7000	7600	8000	10000
Max. AC Output Apparent Power	[VA]	7700	8360	8800	11000
Max. AC Input/Output Current	[A]	60.9/33.5	66.1/36.3	69.6/38.3	69.6/47.8
Nominal AC Output Current	[A]	30.4	33.0	34.8	43.5
Nominal AC Voltage	[V]		220/230/240		
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]	170	180	190	210
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 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, Groundfault circuit interrupter (GFCI)			
Surge Protection Leve		TYPE II(DC), TYPE II(AC)			
EPS (OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)					
Nominal Output Power	[W]	7000	7600	8000	10000
Peak Apparent Power	[VA]	14000 (20s)	15200 (20s)	16000 (20s)	20000 (20s)
Max.Continuous Current	[A]	30.4	33.0	34.8	43.5
Continous 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 Temper ature Range	[°C]		-40~+65		
Over Voltage Category			OVC II(DC), OVC III(AC)		
Dimensions (W×H×D)	[mm]		420*505*236		
Net Weight	[kg]		29		
Cooling Type			Intelligent Air Cooling		
Communication Interfaces			RS485/CAN/WiFi/LAN 84G (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 50549-1A			
Compatible Batteries		Pylontech;Austa			