

LOW VOLTAGE RESIDENTIAL SERIES

AU12-16KESL SINGLE-PHASE HYBRID INVERTER



High Performance

- Triple MPPT design
- 150% DC oversizing capability
- 120 V startup voltage
- Max. efficiency up to 97.30%



Stable and Reliable Operation

- Transfer time < 15 ms
- Max. charge/discharge current up to 275A
- 200% overload capacity for 10 seconds in off-grid mode



Flexible System Design

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



>250A
Max charge/
discharge current



1.5times
3 MPPTs with
input



<15ms
EPS
switch time



IP65
ingress
protection

Technical Specification

		AU12KESL	AU14KESL	AU16KESL
PV INPUT				
Max. PV Array Power	[kW]	18	21	22.5
Max. DC Input Voltage	[V]		550	
Start-Up Voltage	[V]		120	
MPPT Voltage Range	[V]		120-480	
Max. Input Current	[A]		3*26	
Isc PV (Absolute Maximum)	[A]		3*39	
Number Of MPP Trackers			3	
Strings Per MPP Tracker			2+2+2	
AC INPUT/OUTPUT (GRID)				
Rated Power	[kW]	12	14	16
Max. Continuous Current	[A]	52.2	60.9	69.6
Max. Output Overcurrent Protection	[A]		100	
Rated Voltage	[V]		220/230/240, L+N+PE	
Rated Frequency	[Hz]		50/60	
Switch Time	[ms]		<15	
Displacement Power Factor			0.8 leading-0.8 lagging	
BATTERY PARAMETERS				
Battery Type		Lead-acid or Lithium-ion		
Voltage Range	[V]		40-60	
Rated Voltage	[V]		51.2	
Max. Charge/Discharge Current	[A]	250/250	275/275	275/275
Reverse Connect Protection			Yes	
EQUIPMENT PROTECTION				
Integrated	Insulation Monitoring, Residual Current Monitoring, Parallel Function, Output over voltage, Output over current, Short circuit, Surge, Temperature			
AC OUTUPT (EPS)				
Rated Output Active Power	[kW]	12	14	16
Rated Output Apparent Power	[kVA]	12	14	16
Rated Output Current	[A]	52.2	60.9	69.6
EPS Rated Output Voltage	[V]		220/230/240, L+N+PE	
EPS Rated Output Frequency	[Hz]		50/60	
Overload Capacity (Off Grid)			200% (<10s)/150% (<60s)	
SYSTEM DATA				
Max.Efficiency	[%]		97.30	
MPPT Efficiency	[%]		99.90	
Euro.Efficiency	[%]		96.50	
Ingress Protection			IP65	
Operating Temperature Range		-25°C~+60°C (Linely derating to 60% when exceed +45°C ~ +60°C)		
Max. Operating Altitude	[m]		4000 (>2000 Derating)	
Typical Noise Emission	[dB]		<50	
Storage Temperature Range	[°C]		-25~+60	
Dimensions (W×H×D)	[mm]		466*756*242	
Net Weight	[kg]		40	
Display			LCD+APP	
Communication Interfaces		RS485/WiFi/CAN/Bluetooth (Optional: LAN/Meter)		
STANDARD				
Certifications	EC62109-1/2, IEC 62477-1, IEC61000-6-1, EC 61000-6-3 EN 50549-18-10, NRS 097-2-1, ABNT NBR 16149 EC61727, IEC61683, EC62116 etc.			