




Single-phase Hybrid Inverter




> KEY STRENGTHS

 Max. 4pcs in parallel.

 Switch time of on / off-grid $\leq 10\text{ms}$.

 Compatible with lead-acid and lithium-ion battery .

 Adapt to impact load.

> APPLICATION AREA



Luxury villa



Residential electricity



Nomadic farm



Communication base station

L1 series single-phase hybrid inverters support simultaneous input of PV, batteries, DG, power grids, and loads. It has multiple application modes such as self-consume, peak shaving and valley filling, and backup power supply. It supports parallel connection of multiple machines and is suitable for various applications of home energy storage.

PV string input

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Max. power(kW)	4.6	4.6	6	6	7	7
Max. DC voltage(V)	550					
MPPT voltage range(V)	125~500					
Max.input current of single MPPT(A)	14					
No. of strings per MPPT trackers	1/1					

AC output

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Rated output power(kVA)	3	3.68	4	4.6	5	6
Rated output current(A)	13	16	17.4	20	21.7	26
Grid voltage/range(V)	230/176~270					
Rate grid frequency (Hz)	50 / 60					
Power factor	0.99leading-0.99lagging					
THDi	<2%					
AC grid type	L+N+PE					

Battery

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Battery voltage range(V)	40~58					
Max. charging voltage(V)	58					
Max. charge/discharge current(A)	95/62.5	95/76.6	95/83.3	95/95.8	95/104.2	95/110
Battery type	Lithium /Lead-acid					
Communication interface	CAN					

EPS output

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Rated power (kVA)	3	3.68	4	4.6	5	6
Rated output voltage(V)	230					
Rated output current(A)	13	16	17.4	20	21.7	26
Rated frequency (Hz)	50 / 60					
Automatic switchover time (ms)	<10					
THDu	<2%					
Overload capacity	110%, 30S/120%, 10S/150%, 0.02S					

General data

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Battery chage/discharge efficiency	95.0%					
DC Max. efficiency	97.6%					
Europe efficiency	97.0%					
MPPT efficiency	99.9%					
Ingress protection	IP65					
Noise emission (dB)	<40					
Operation temperature (°C)	- 25~ 60 (Derating at 45°C)					
Cooling	Natural					
Relative humidity	0 ~95% (non-condensing)					
Operating altitude	2,000m(>2,000 Derating)					
Dimensions W * D * H (mm)	550*200*520					
Net weight (kg)	25					
Topology	Non-isolated					
Self-consumption at night (W)	15~25					

Display and communication

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Display	LCD					
Interface:RS485/Wifi/4G/CAN/DRM	Yes/ Opt/ Opt/ Yes/Yes					
Safety standard	IEC/EN62109-1/-2					
EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-3					
On-grid	South Africa NRS097-2-1:2017, UK G98,G99,EN 50549-1,Italy CEI 0-21, Germany VDE4105,IEC61727/62116/61683, Sweden EIFS 2018: 2					