

SINGLE-PHASE ESS HYBRID INVERTER

- Supports automatic battery switching;
- Support diesel generator input source;
- Compatible with lead-acid and lithium-ion batteries;
- Parallel available, intelligent BMS management;
- Input power source priority can be set by users;
- Battery reverse connection protection, anti-power control function;



• WH3KL1 • WH5KL1 • WH6KL1

THREE PHASE ESS HYBRID INVERTER



• WH8KL3 • WH10KL3 • WH12KL3

- Compatible with lead-acid and lithium-ion batteries;
- Support diesel generator input source;
- IP65 protection, low noise < 35dB;
- Battery reverse connection protection, anti-power control function
- Input power source priority can be set by users;
- Support full power discharge, automatic management of battery charge and discharge;

Residential Energy Storage Inverters

Technical specification	WH3KL1	WH5KL1	WH6KL1	WH8KL3	WH10KL3	WH12KL3
Input (PV)						
Max.power(KW)	4.6	7	7	10.4	13	15.6
Max. DC voltage(V)		550			1,000	
MPPT voltage range(V)		125~500			180~850	
Max.input current of single MPPT(A)		14			12.5	
MPPT tracker/strings		2/1		2/1	2/1	2/1
AC output						
Rated output power(kVA)	3	5	6	8.8	11	13.2
Max. output current(A)	13	21.7	26	12.7	15.9	19.1
Grid voltage/range(V)		230/176~270			400/360~440	
Frequency (Hz)		50 /60			50 /60	
Power factor		0.8lagging-0.8leading			0.8lagging-0.8leading	
THDi		<3%			<3%	
AC output topology		L+N+PE			3W+N+PE	
Battery						
Battery voltage range(V)		40~58			125~600	
Max. charging voltage(V)		58			600	
Full battery voltage(V)	95/62.2	95/104.2	95/110	210	270	250
Max. charge/discharge current(A)				40	40	50
Battery type		lithium /Lead-acid			lithium /Lead-acid	
Communication Interface		CAN/RS485			CAN/RS485	
EPS output						
Rated power(kVA)	3	5	6	8.8	11	13.2
Rated output voltage(V)		230			400	
Max. output current(A)	13	21.7	26	12.7	15.9	19.1
Rated frequency(Hz)		50 /60			50 /60	
Automatic switching time(ms)		<20			<20	
THDu		<2%			<2%	
Overload capacity		110%, 30S/120%, 10S/150%, 0.02S			110%, 30S/120%, 10S/150%, 0.02S	
General data						
Battery charge /discharge efficiency		95.0%			96.6%	96.7%
DC Max. efficiency		97.6%			97.9%	98.2%
Europe efficienc		97.0%			97.2%	97.5%
MPPT efficiency		99.9%			99.5%	99.5%
Ingress protection		IP65			IP65	
Noise emission(dB)		<35			<35	
Operation temperature		-25°C~ 60°C			-25°C~ 60°C	
Cooling		Natural			Natural	
Relative Humidity		0 ~95% (non-condensing)			0 ~95% (non-condensing)	
Altitude		2,000m(>2,000 Derating)			2,000m (>2,000 Derating)	
Dimensions W * D * H (mm)		550*200*515			530*200*600	
Weight(kg)		25			29	
Isolation transformer		No			No	
Self-consumption(W)		<3			<3	
Display and communication						
Display		LCD			LCD	
Interface:RS485/Wifi/4G/CAN/DRM		Yes/ Opt/ Opt/ Yes/ Yes			Yes/ Opt/ Opt/ Yes/ Yes	
Safety standard		IEC/EN62109-1/-2, IEC/EN62477-1			IEC/EN62109-1/-2, IEC/EN62477-1	
EMC		IEC/EN 61000-6-1, IEC/EN 61000-6-3			IEC/EN 61000-6-1, IEC/EN 61000-6-3	
On-grid		South Africa NRS097-2-1:2017, UK G98,G99			Europe: EN50549-1, Germany: VDE4105/0124, UK: G99, South Africa: NRS097-2-1:2017	