

# Vestwoods

SINGLE PHASE HYBRID INVERTER

ESS INVERTER SOLUTIONS



Reasonable energy control to increase the proportion of spontaneous use



Max. efficiency 97.3%  
Battery efficiency 94%



Remote configuration and upgrade



With BMS system to ensure high battery life

Model	VW4K6SLES	VW5KSLES	VW6KSLES
<b>Efficiency</b>			
Max. efficiency (PV to AC)		97.3%	
Max. efficiency (BAT to AC)		94.0%	
<b>Input (PV)</b>			
Max. PV power		9000W	
Max. PV voltage		550V	
Max. input current (input A/input B)		15A/15A	
Max. short current (input A/input B)		20A/20A	
Start operating voltage		90V	
MPPT voltage range		70V-520V	
No. of MPPT trackers		2	
String per MPP tracker		1	
<b>Input (BAT)</b>			
Compatible battery type		Lithium-ion / Lead-acid	
Nominal battery voltage		48V	
Battery voltage range		40V-64V	
Max. charge/discharge current	120A/120A	120A/120A	120A/120A
Max. charge/discharge power	5000W/5000W	5000W/5000W	6000W/6000W
Lithium battery charge curve		Self-adaption to BMS	
<b>Output (Grid)</b>			
Nominal AC output power	5000W	6000W	6000W
Max. AC output apparent power	5500VA	6000VA	6000VA
Max. AC output power (PF=1)	4600W	5500W	6000W
Max. AC output current	25A	27.2A	27.2A
Nominal AC voltage		230V	
AC voltage range		150V-300V (Adjustable)	
Rated grid frequency		50Hz/60Hz	
AC frequency range		45Hz-55Hz/55Hz-65Hz (Adjustable)	
Grid connection		single phase	
Power factor		>0.99 @rated power (Adjustable 0.8 LD -0.8 LG)	
THDI		<3% (Rated Load)	
<b>Output (Back up)</b>			
Nominal output voltage		230V	
Nominal output frequency		50Hz/60Hz	
Nominal output power	4600W	5000W	6000W
Nominal output current	20A	21.7A	26A
Transfer time		10ms (typ)/20ms (max)	
THDV		< 3% @100% (RCD Load)	
<b>Protection</b>			
Protection category		Class I	
DC switch		Support	
Anti-islanding protection		Support	
AC overcurrent protection		Support	
AC short circuit protection		Support	
DC reverse connection		Support	
Surge Arrester		DC Type III, AC Type III	
Insulation detection		Support	
Leakage current protection		Support	
GEN		Support	
AC overvoltage category		III	
<b>General</b>			
Max. operation altitude		4000m	
Noise emission		< 35dB	
Ingress protection degree		IP65	
Operating temperature range		-25°C~60°C	
Relative humidity		0~100%	
Cooling concept		Natural Cooling	
Mounting		Wall bracket	
Dimensions (W*H*D)		515mm*485mm*175mm	
Weight		25Kg	
PV connection		MC4/H4	
Battery connection		Dedicated DC connector	
AC connection way (grid & back up)		Dedicated AC connector	
<b>HMI &amp; COM</b>			
Display		LED+APP(Bluetooth)	
Communication interface		RS485/CAN (for BMS), RS485, USB, DRM/RS485(for Meter), Optional: WiFi/GPRS/LAN	
<b>Certification</b>			
Grid	VDE-AR-N4105, IEC 61727/62116, AS 4777.2, EN 50549-1, C10/11, G99, CEI 0-21, NRS 097-2-1, RD 1699/661/413, NTS		
Safety	IEC62109-1&2, IEC62040-1, IEC62477-1		
Warranty	5 Years / 10 Years (Optional)		