

LV SERIES

Single Phase Hybrid Inverter

3 - 8 kW



Up to 200% PV Oversizing
Large PV input maximizing yield & high performance



Flexible PV Selection
Up to 18A per MPPT
100V startup voltage



UPS Level Transition
Switching Time < 4ms



Overload Ability
200% for 10s



Model	VEH-S3KA3-LV	VEH-S3.6KA3-LV	VEH-S4.6KA3-LV	VEH-S5KA3-LV	VEH-S6KA3-LV	VEH-S8KA3-LV
Battery						
Battery Type	Li-ion/Lead-acid					
Battery Voltage Range	40-60V					
Max. Charge/Discharge Current	75/75A	90/90A	115/115A	120/120A	135/135A	140/140A
Max. Charge/Discharge Power	3000/3150W	3600/3800W	4600/4850W	5000/5250W	6000/6300W	8000/8300W
Charging Strategy For Li-ion Battery	Self-adaption to BMS					
Charging Curve	3 Stages/Equalization					
External Temperature Sensor	Optional					
Communication	CAN					
PV Input						
Recommended Max. PV Power	6000W	7200W	9200W	10000W	12000W	16000W
Max. Input Voltage	550V					
Rated Voltage	360V					
Start-up Voltage	100V					
MPPT Voltage Range	90-500V					
Max. Input Current	18/18A					
Max. Short Circuit Current	27/27A					
MPPT Number/Max. Input Strings Number	2/2					
AC Input and Output (On-grid)						
Rated Output Power	3000W	3680W	4600W	5000W	6000W	8000W
Max. Output Apparent Power	3300VA	3680VA	4600VA	5500VA	6600VA	8000VA
Max. Continuous AC Bypass Current	50A					
Grid Form	L/N/PE					
Rated AC Output Voltage/Range	220/154-264, 230/161-276, 240/168-288					
Rated Grid Frequency	50/60Hz					
Max. Output Current	15A	15A	20.9	25A	30A	36.4A
Power Factor	>0.99 (0.8 leading-0.8 lagging)					
AC Output (Off-grid)						
Rated Output Power	3000W	3680W	4600W	5000W	6000W	8000W
Max. Output Apparent Power	6000VA, 10s	7360VA, 10s	9200VA, 10s	10000VA, 10s	12000VA, 10s	16000VA, 10s
Back-up Switch Time	0ms					
Grid Form	L/N/PE					
Rated Output Voltage	220/230/240V					
Rated Output Frequency	50/60Hz					
Max. Continuous Output Current	13.6A	16.7A	20.9A	22.7A	27.3A	36.4A
THDv (@linear load)	<3%					
Efficiency						
MPPT Efficiency	99.9%					
Max. Efficiency				97.7%	97.5%	
EU Efficiency	97.0%					
Protection						
Anti-islanding Protection				Integrated		
PV String Input Reverse Polarity Protection				Integrated		
Insulation Resistor Detection				Integrated		
Residual Current Monitoring Unit				Integrated		
AC Over Current Protection				Integrated		
AC Short Current Protection				Integrated		
AC Overvoltage and Undervoltage Protection				Integrated		
Surge Protection	DC Type II/AC Type III					
General						
Dimensions (W*H*D)	506*495*99mm					
Weight	17kg					
Mounting	Wall mounting					
Operating Temperature	-25°C to +65°C (>45°C, derating)					
Relative Humidity	0-95%, no condensing					
Cooling	Natural convection					
Topology (Solar/Battery)	Transformerless/High-frequency isolation					
Altitude	≤4000m					
Protection Degree	IP66					
Noise	<35dB					
User Interface	LED, App					
Digital Input/output	DRM, 1×DI, 2×DO					
Communication	RS485, Wi-Fi/Ethernet (optional)					
Certifications and Standards						
Grid Connection Standard	G98, G99, G100, EN 50549-1/-10, NF EN 50549-1/-10, CEI 0-21, PEA, MEA, IEC 62116, IEC 61727, IEC 60068, IEC 61683, DEWA, IEC 62109-1/-2, EN 61000-6-1/-3					
Safety/EMC Standard	IEC 62109-1/-2, EN 61000-6-1/-2/-3/-4					