

LV SERIES

Three Phase Hybrid Inverter

5 - 20 kW



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



Flexible PV Selection
Up to 20A per MPPT
4MPPTs



100% Unbalanced Output
Max output of each phase up to 50% rated power



Overload Ability
200% for 10s



Model	VEH-T15KA3-LV	VEH-T20KA3-LV
Battery		
Battery Voltage Range	40-60V	
Max. Charge/Discharge Current	300/300A	350/350A
Charging Strategy For Li-ion Battery	Self-adaption to BMS	
Charging Curve	3 Stages/Equalization	
PV Input		
Recommended Max. PV Power	30000W	40000W
Max. Input Voltage	1000V	
Rated Voltage	720V	
Start-up Voltage	150V	
MPPT Voltage Range	150-900V	
Max. Input Current	20A/20A/20A/20A	
Max. Short Circuit Current	30A/30A/30A/30A	
MPPT Number/Max. Input Strings Number	4/4	
AC Input and Output (On-grid)		
Rated Output Power	15000W	20000W
Max. Output Apparent Power	16500VA	22000VA
Grid Form	3L/N/PE	
Rated AC Output Voltage/Range	380V/400V, 266V-480V	
Rated Grid Frequency	50/60Hz	
Max. Output Current	25A	33.3A
Power Factor	>0.99 (0.8 leading ... 0.8 lagging)	
THDi (@Rated Output)	<3%	
AC Output (Back-up)		
Rated Output Power	15000W	20000W
Max. Output Apparent Power	30000VA, 10s	40000VA, 10s
Back-up Switch Time	<10ms	
Grid Form	3L/N/PE	
Rated Output Voltage	380V/400V	
Rated Output Frequency	50/60Hz	
Max. Continuous Output Current	22.8A	30.4A
Max. Continuous AC Bypass Current	50A	
THDv (@linear load)	<3%	
Efficiency		
MPPT Efficiency	99.9%	
Max. Efficiency	98.5%	
EU Efficiency	98.0%	
Max. Battery Discharge to AC Efficiency	95.7%	
General		
Protection	Anti-islanding protection, PV string input reverse polarity protection, Insulation resistor detection, Residual current monitoring unit, AC over current protection, AC short current protection, AC overvoltage and undervoltage protection, Surge protection (DC Type II/AC Type III)	
Dimension(W*H*D)	539*696*232mm	
Weight	41kg	
Mounting	Wall mounting	
Operating Temperature	-25°C to +65°C (>45°C, derating)	
Relative Humidity	0-95%, no condensing	
Cooling	Smart fan	
Topology (Solar/Battery)	Transformerless/High-frequency isolation	
Altitude	≤4000m (>2000m, derating)	
Protection Degree	IP66	
Noise	< 55dB	
User Interface	LED, App	
Digital Input/Output	DRM, 2 × DI, 2 × DO	
Communication	RS485, Wi-Fi/WL/4G (optional)	
Certifications and Standards		
Grid Connection Standard	IEC 61727, IEC 62116, EN 50549, VDE-AR-N 4105	
Software Approval	IEC 62109-1/-2, EN 61000-6-1/-2/-3/-4	

*This series is recommended to be compatible with VE-L & VE-W series of batteries.