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WES LV Series

5-10kW I Three Phase Hybrid Inverter

WES LV Series integrates its technical strengths that make it one of the most adaptive options in the market for flexible residential needs.

The series brings values of high-power generation and charging power for optimal energy harvest, flexible applications enabled by smart load control and 100% unbalanced output, and sustainable system reliability and safety. It is a true versatile quality investment that extends application scenarios and maximizes self-consumption ratios.

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Technical Data	WESLV5K	WESLV6K	WESLV8K	WESLV10K	WESLV12K
Battery Input Data					
Battery Type	Li-Ion & Lead acid				
Charging Strategy for Li-ion Battery	Self-Adaption to BMS				
Battery Voltage Range (V)	40-60				
Max. Charging Current (A)	120	150	190	210	240
Max. Discharging Current (A)	120	150	190	210	240
External Temperature Sensor	YES				
Charging Curve	3 Stages / Equalization				
PV String Input Data					
Max. DC Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160-800)				
MPPT Operating Voltage Range (V)	200 ~ 650				
Start-up Voltage (V)	160				
Full Load DC Voltage Range (V)	350-650				
PV Input Current (A)	13 + 13			26 + 13	
Max. Short Circuit Current per MPPT (A)	17 + 17			34 + 17	
Number of MPP Trackers	2				
Number of Strings per MPPT	1			2 + 1	
AC Output Data (On-grid)					
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000
Max. AC Output Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6 / 7.2	9.1 / 8.7	12.1 / 11.6	15.2 / 14.5	18.2 / 17.4
Max. AC Current (A)	11.4 / 10.9	13.6 / 13	18.2 / 17.4	22.7/21.7	27.3/26.1
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 Leading to 0.8 Lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
Max. Total Harmonic Distortion	< 3% (Of nominal Power)				
DC current injection	< 0.5% In				
Efficiency					
Max. Efficiency	97.60 %				
European Efficiency	97.00 %				
MPPT Efficiency	99.90 %				
Protection					
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection				
Output Over Voltage Protection	DC Type II/AC Type III				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (°C)	-40 ~ +60℃, >45℃ derating				
Relative Humidity	0 ~ 95%				
Cooling	Natural				
Communication with BMS	RS485, CAN				
Communication with Meter	RS485				
Weight (kg)	33.6 Kg				
Dimension (W × H × D mm)	422 × 699.3 × 279				
Topology	Non-isolated				
Noise (dB)	<45				
Ingress Protection Rating	IP 65				
Mounting Method	Wall Mounted				