

WeVolt

WeVolt Renewable Energy Co.,Ltd.

IP55 Series

**Less Maintenance Worries.
Longer Protection.**



Version: 2

Date: 2026/02/26



WVLVS-6KW-IP55

Reliable Off-Grid Power for Energy Independence

KEY CONFIGURATION



Centrifugal Fan



Noise <45 dB



CT Included

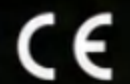


Generator Input Included



2 MPPT

CERTIFICATIONS



EN 62109-1

EN 62109-2

IEC61000

BENEFITS



IP55 Protection for a Longer Lifecycle



Inverter Warranty: 3-Year Replacement + 2-Year Repair



High Surge Power for Heavy Loads



Compatible with Various DIY LiFePO4 Batteries



Quieter Operation for Peaceful Daily Use



Open Communication for 3rd-Party Monitoring Apps



WVLVS-IP55-6KW	
PV (DC Input)	
Recommended max. PV input power	12000W
Max. input voltage (Voc)	500V
MPPT operating voltage range	85V-450V (@85V start up)
Number of MPPT	2
Max. number of input strings per MPPT	2
Max. input current per MPPT	18A
Max. short-circuit current per MPPT	22A
Grid (AC Input)	
Max. input power	11500W
Max. input current	50A
Rated grid voltage	220/230/240Vac
Rated grid frequency	50/60Hz
Acceptable range	170-280Vac; 90-280Vac
Generator (AC Input)	
Max. input power	9200W
Rated input voltage/frequency	220/230/240V, 45-65Hz
Max. generator input current	40A
Battery parameters (Bidirection)	
Battery type	LiFePO4 / Lead-acid
Battery voltage range	40-60Vdc
Rated battery voltage	48Vdc
Max. charge/discharge current	120A/130A
BMS communication mode	RS485/CAN
Back-up Output (AC Output)	
Rated output power	6000W/6000VA (Dural outputs)
Rated output current	27.3A
Rated output voltage/Frequency	220/230/240Vac 50/60Hz
Parallel Capacity	Single-phase Max. 9 units; Three-phase Max. 12 units
Surge power	12000VA 5s
THDv (@ linear load)	<3%
Switching time	10ms typical; 20ms typical
Efficiency	
Peak efficiency	98%
Max. MPPT efficiency	99.9%
Protection	
Inner protection	Output short-circuit protection; Output overvoltage protection
Surge protection	PV: Type III, AC: Type III
IP rating	IP55
General Parameters	
Operating temperature range	-10°C-50°C
Relative humidity range	5%-95%
Max. operating altitude	>2000m derating
Standby self-consumption	<15W
Installation type	Wall-mounted
Cooling mode	Smart cooling (Centrifugal fan)
Communication	RS232/RS485/Dry contact/WI-FI
Display	LCD
Mechanical Specifications	
Inverter dimensions (L*W*H)	430*142*148mm
Net weight	12.2kg
Carton dimensions (L*W*H)	560*465*240mm
Gross weight	14.6kg
Warranty period	3-Year Replacement & 2-Year Repair



WVLVS-8KW-IP55

Reliable Off-Grid Power for Energy Independence

KEY CONFIGURATION



Centrifugal Fan



Noise <45 dB



CT Included



Generator Input Included



2 MPPT

CERTIFICATIONS



EN 62109-1

EN 62109-2

IEC61000

BENEFITS



IP55 Protection for a Longer Lifecycle



Inverter Warranty: 3-Year Replacement + 2-Year Repair



High Surge Power for Heavy Loads



Compatible with Various DIY LiFePO4 Batteries



Quieter Operation for Peaceful Daily Use



Open Communication for 3rd-Party Monitoring Apps



WVLVS-IP55-8KW	
PV (DC Input)	
Recommended max. PV input power	16000W
Max. input voltage (Voc)	500V
MPPT operating voltage range	85V-450V (@85V start up)
Number of MPPT	2
Max. number of input strings per MPPT	2
Max. input current per MPPT	27/27A (MAX:54A)
Max. short-circuit current per MPPT	32A/32A
Grid (AC Input)	
Max. input power	14950W
Max. input current	65A
Rated grid voltage	220/230/240Vac
Rated grid frequency	50/60Hz
Acceptable range	170-280Vac; 90-280Vac
Generator (AC Input)	
Max. input power	11500W
Rated input voltage/frequency	220/230/240V, 45-65Hz
Max. generator input current	50A
Battery parameters (Bidirection)	
Battery type	LiFePO4 / Lead-acid
Battery voltage range	40-60Vdc
Rated battery voltage	48Vdc
Max. charge/discharge current	160A/180A
BMS communication mode	RS485/CAN
Back-up Output (AC Output)	
Rated output power	8000W/8000VA (Dural outputs)
Rated output current	36.4A
Rated output voltage/Frequency	220/230/240Vac 50/60Hz
Parallel Capacity	Single-phase Max. 9 units; Three-phase Max. 12 units
Surge power	16000VA 5s
THDv (@ linear load)	<3%
Switching time	10ms typical; 20ms typical
Efficiency	
Peak efficiency	98%
Max. MPPT efficiency	99.9%
Protection	
Inner protection	Output short-circuit protection; Output overvoltage protection
Surge protection	PV: Type III, AC: Type III
IP rating	IP55
General Parameters	
Operating temperature range	-10°C-50°C
Relative humidity range	5%-95%
Max. operating altitude	>2000m derating
Standby self-consumption	<20W
Installation type	Wall-mounted
Cooling mode	Smart cooling (Centrifugal fan)
Communication	RS232/RS485/Dry contact/WI-FI
Display	LCD
Mechanical Specifications	
Inverter dimensions (L*W*H)	550*413*150mm
Net weight	17.5kg
Carton dimensions (L*W*H)	/
Gross weight	/
Warranty period	3-Year Replacement & 2-Year Repair