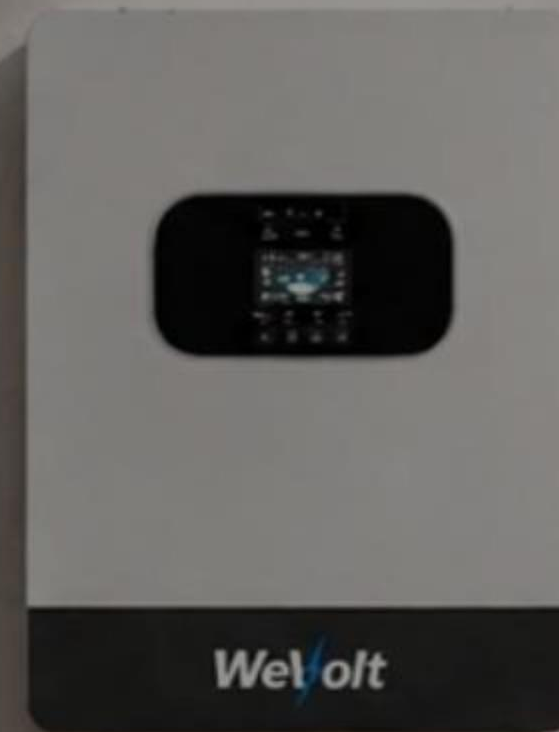


**WeV**olt

**WeVolt Renewable  
Energy Co.,Ltd.**

**IP54 Series**

**Less Maintenance Worries.  
Longer Protection.**



**Version: 2**

**Date: 2026/02/26**



# WVLVS-6KW-IP54

## Solar Inverter

Reliable Off-Grid Power for Energy Independence

Capacity <b>6kW</b>	PV <b>500V</b>	AC <b>230V</b>	Battery <b>48V</b>

Certifications: CE, EN 62109-1, EN 62109-2, IEC61000

IP54 Higher Protection for Longer Lifecycle

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

High Surge Power for Large Workload

Compatible with Various DIY LiFePO4 Batteries

Quieter Operation for a Peaceful Daily Use

Open Communication for 3rd Party Monitoring APPs






WVLVS-IP54-6KW	
<b>PV (DC Input)</b>	
Recommended max. PV input power	8000W
Max. input voltage (Voc)	500V
MPPT operating voltage range	85V-450V (@85V start up)
Number of MPPT	1
Max. number of input strings per MPPT	2
Max. input current per MPPT	27A
Max. short-circuit current per MPPT	35A
<b>Grid (AC Input)</b>	
Max. input power	11500W
Max. input current	50A
Rated grid voltage	220/230/240Vac
Rated grid frequency	50/60Hz
Acceptable range	170-280Vac (For UPS); 90-280Vac (For Home Appliances)
<b>Generator (AC Input)</b>	
Max. input power	/
Rated input voltage/frequency	/
Max. generator input current	/
<b>Battery parameters (Bidirection)</b>	
Battery type	LiFePO4 / Lead-acid
Battery voltage range	40-60Vdc
Rated battery voltage	48Vdc
Max. charge/discharge current	120A/130A
BMS communication mode	RS485
<b>Back-up Output (AC Output)</b>	
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. 12 units; Three-phase Max. 12 units
Surge power	12000VA 5s
THDv (@ linear load)	<3%
Switching time	10ms typical (For UPS); 20ms typical (For Home Appliances)
<b>Efficiency</b>	
Peak efficiency	98%
Max. MPPT efficiency	99.9%
<b>Protection</b>	
Inner protection	Output short-circuit protection; Output overvoltage protection
Surge protection	PV: Type III, AC: Type III
IP rating	IP54
<b>General Parameters</b>	
Operating temperature range	-10°C-55°C
Relative humidity range	5%-95%
Max. operating altitude	>2000m derating
Standby self-consumption	<10W
Installation type	Wall-mounted
Cooling mode	Fan cooling
Communication	RS232/RS485/Dry contact/WI-FI
Display	LCD
<b>Mechanical Specifications</b>	
Inverter dimensions (L*W*H)	445*347*120mm
Net weight	12.4kg
Carton dimensions (L*W*H)	560*465*240mm
Gross weight	14.6kg
Warranty period	5 Years (3-Year Replacement & 2-Year Repair)



# WVLVS-8KW-IP54 Solar Inverter

Reliable Off-Grid Power for Energy Independence

 Capacity <b>8kW</b>	 CT <b>Included</b>	 Generator Input <b>Included</b>	 MPPT <b>2</b>
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 Certifications: CE, EN 62109-1, EN 62109-2, IEC61000

-  IP54 Higher Protection for Longer Lifecycle
-  Inverter Warranty: 3-Year Replacement and 2-Year Repair
-  High Surge Power for Large Workload
-  Compatible with Various DIY LiFePO4 Batteries
-  Quieter Operation for a Peaceful Daily Use
-  Open Communication for 3rd Party Monitoring APPs



	WVLVS-IP54-8KW
<b>PV (DC Input)</b>	
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
<b>Grid (AC Input)</b>	
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
<b>Generator (AC Input)</b>	
Max. input power	11500W
Rated input voltage/frequency	220/230/240V, 45-65Hz
Max. generator input current	50A
<b>Battery parameters (Bidirection)</b>	
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
<b>Back-up Output (AC Output)</b>	
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
<b>Efficiency</b>	
Peak efficiency	98%
Max. MPPT efficiency	99.9%
<b>Protection</b>	
Inner protection	Output short-circuit protection; Output overvoltage protection
Surge protection	PV: Type III, AC: Type III
IP rating	IP54
<b>General Parameters</b>	
Operating temperature range	-10°C-55°C
Relative humidity range	10%-95%
Max. operating altitude	>2000m derating
Standby self-consumption	<20W
Installation type	Wall-mounted
Cooling mode	Fan cooling
Communication	RS232/RS485/Dry contact/WI-FI
Display	LCD
<b>Mechanical Specifications</b>	
Inverter dimensions (L*W*H)	520*420*125mm
Net weight	17.5kg
Carton dimensions (L*W*H)	/
Gross weight	/
Warranty period	3-Year Replacement & 2-Year Repair



# WVLVS-12KW-IP54 Solar Inverter

Reliable Off-Grid Power for Energy Independence

Capacity <b>12kW</b>	CT <b>Included</b>	Generator Input <b>Included</b>	MPPT <b>2</b>

Certifications: CE, EN 62109-1, EN 62109-2, IEC61000

IP54 Higher Protection for Longer Lifecycle

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

High Surge Power for Large Workload

Compatible with Various DIY LiFePO4 Batteries

Quieter Operation for a Peaceful Daily Use

Open Communication for 3rd Party Monitoring APPs



WVLVS-IP54-12KW	
<b>PV (DC Input)</b>	
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
<b>Grid (AC Input)</b>	
Max. input power	20700W
Max. input current	90A
Rated grid voltage	220/230/240Vac
Rated grid frequency	50/60Hz
Acceptable range	170-280Vac; 90-280Vac
<b>Generator (AC Input)</b>	
Max. input power	12000W
Rated input voltage/frequency	230V, 50/60Hz
Max. generator input current	70A
<b>Battery parameters (Bidirection)</b>	
Battery type	LiFePO4 / Lead-acid
Battery voltage range	40-60Vdc
Rated battery voltage	48Vdc
Max. charge/discharge current	210A/230A
BMS communication mode	RS485
<b>Back-up Output (AC Output)</b>	
Rated output power	12000W/12000VA (Dural outputs)
Rated output current	54.5A
Rated output voltage/Frequency	220/230/240Vac 50/60Hz
Parallel Capacity	Single-phase Max. 6 units; Three-phase Max. 12 units
Surge power	24000VA 5s
THDv (@ linear load)	<3%
Switching time	10ms typical; 20ms typical
<b>Efficiency</b>	
Peak efficiency	98%
Max. MPPT efficiency	99.9%
<b>Protection</b>	
Inner protection	Output short-circuit protection; Output overvoltage protection
Surge protection	PV: Type III, AC: Type III
IP rating	IP54
<b>General Parameters</b>	
Operating temperature range	-10°C-55°C
Relative humidity range	10%-95%
Max. operating altitude	>2000m derating
Standby self-consumption	<20W
Installation type	Wall-mounted
Cooling mode	Fan cooling
Communication	RS232/RS485/Dry contact/WI-FI
Display	LCD
<b>Mechanical Specifications</b>	
Inverter dimensions (L*W*H)	630*525*125mm
Net weight	28.5kg
Carton dimensions (L*W*H)	/
Gross weight	/
Warranty period	3-Year Replacement & 2-Year Repair