

WECO

WECO A-KOOL 107 A-I-O Battery Energy Storage System

Easy.
Efficient.
Reliable.



AIR COOLED ALL-IN-ONE BESS

Hybrid Inverter 25 ~ 100 kW & 107 kWh Integrated Outdoor Cabinet

Future-proof your business with cutting-edge technology for long-term energy security
The Next Generation Of Air-Cooled Lithium BESS Cabinets

WECO A-KOOL 107 A-I-O

ALL-IN-ONE ENERGY STORAGE SYSTEM



KEY FEATURES

- Plug & Play
- Full-Power Back-Up Output
- Parallel up to 10 Cabinets
- Power: 25~100 kW
- Up to 1C Charge/Discharge
- Storage: 40~107 kWh
- Indoor or Outdoor
- Fire Detection+Suppression
- Flood Detection
- Intrusion Detection
- Washable Filters
- Over-Pressure Release
- Temperature -20 to 45 °C
- Remote Control (TCP/IP)

Refer to the I&O Manual for operation details

wecobatteries.com



60~100 kW

1C

DOUBLE INVERTER



25~50 kW

0.5C

SINGLE INVERTER

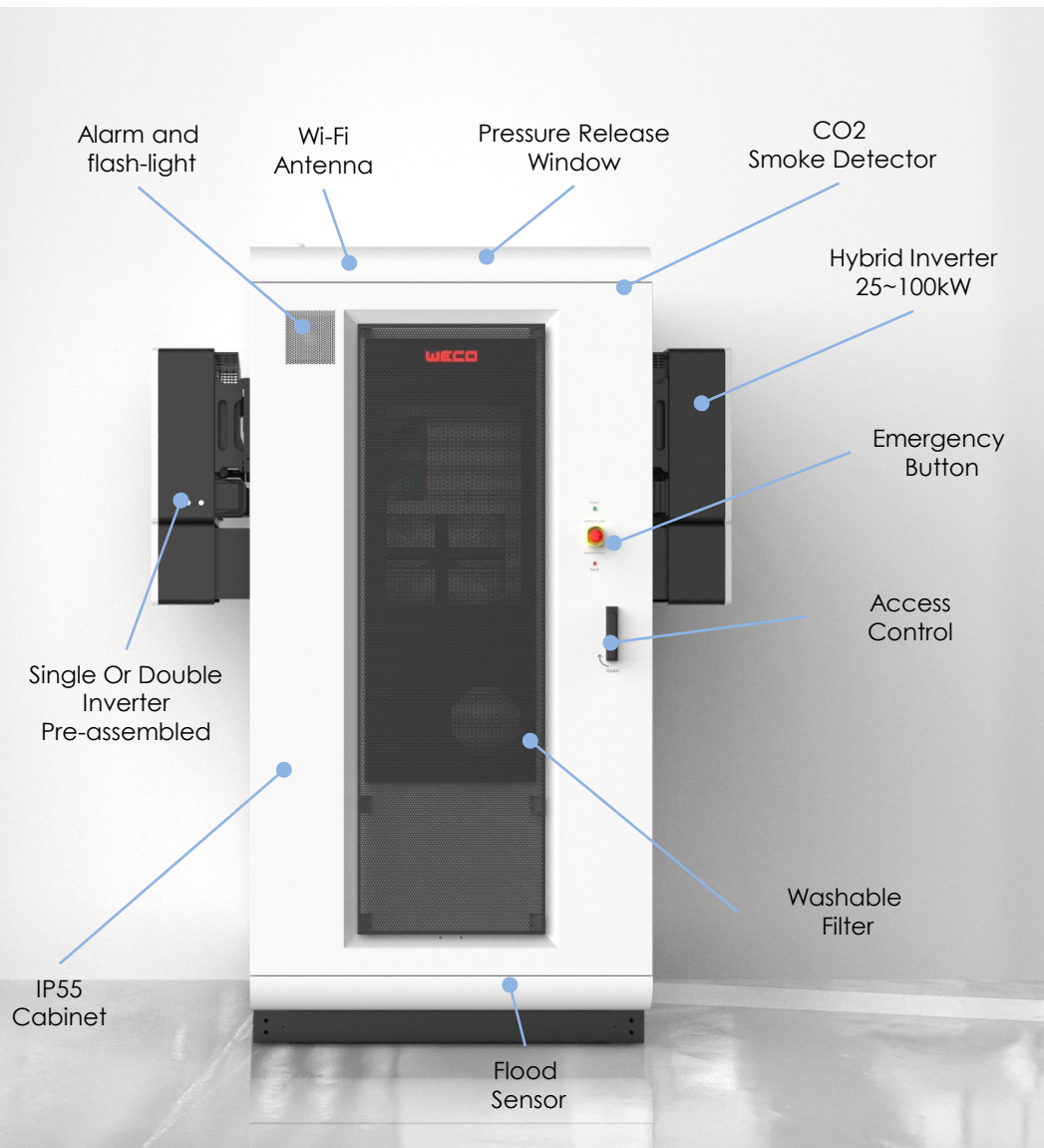
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for long-term energy security

The Next Generation
Of Integrated All-In-One Hybrid Inverters
With Air-Cooled Lithium Battery Cabinets





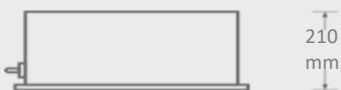
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ALL-IN-ONE ENERGY STORAGE SYSTEM

THREE-PHASE HYBRID INVERTER

Specifications

	25 KW	30 KW	40 KW	50 KW
PV INPUT	Max. Power of PV Array			
	37,5 kW	45 kW	60 kW	75 kW
	Max. Input Voltage			
	850 V			
	MPPT Voltage Range			
	200 ~ 850 V			
	Min. Input Voltage / Start voltage			
200 V				
No. of Independent MPPT Trackers				
4				
No. of Independent MPPT Strings per MPPT Input				
2				
Max. Input Current per MPPT Tracker				
30 A				
Max. Short-circuit Current per MPPT Tracker				
40 A				
BATTERY	Battery Type			
	WECO LFP			
	Battery Voltage Range			
	135 ~ 860 VDC			
Max. Charging Current / Max. Discharging Current				
100 A / 100 A				
Rated Charging / Discharging Current				
100 A / 100 A				
AC OUTPUT	Normal AC Voltage			
	3W+N+PE, 220 / 380 V ; 230 / 400V ; 240 / 415 V			
	AC Voltage Range			
	360 ~ 400 VAC			
	Rated AC Grid Frequency			
	50 / 60 Hz			
	AC Grid Frequency Range			
	50 ± 5 Hz / 60 ± 5 Hz			
Rated Active Power				
25 kW	30 kW	40 kW	50 kW	
Rated Apparent Output Power				
27.5 kVA	33 kVA	44 kVA	55 kVA	
Rated Grid Output Current (@400 V)				
42 A	50 A	66 A	83 A	
Harmonics THDI (@Nominal power)				
< 3%				
AC INPUT	Rated Grid Voltage			
	3W+N+PE, 220 / 380 V ; 230 / 400V ; 240 / 415 V			
	Rated Grid Frequency			
	50 / 60 Hz			
	Rated Active Power			
	25 kW	30 kW	40 kW	50 kW
Max. Apparent Input Power From Grid				
30 kVA	36 kVA	48 kVA	60 kVA	
Max. Input Current				
42 A	50 A	66 A	83 A	
Rated Input Current From Grid				
42 A	50 A	66 A	83 A	
BACKUP OUTPUT	Nominal Output Voltage			
	3W+N+PE, 220 / 380 V ; 230 / 400V ; 240 / 415 V			
	Rated Output Frequency			
	50 / 60 Hz			
	Rated Active Power			
	25 kW	30 kW	40 kW	50 kW
	Max. Apparent Output Power			
	27.5 kVA	33 kVA	44 kVA	55 kVA
Peak Active Output Power				
27.5 kVA	33 kVA	44 kVA	55 kVA	
Rated Current (@400V)				
42 A	50 A	66 A	83 A	
Max. Output Current				
42 A	50 A	66 A	83 A	
Max. Switch Time				
≤ 20 ms				
Output THDI (@Linear load)				
< 3%				
EFFICIENCY	MPPT Efficiency			
	≥ 99.5%			
	Max. Efficiency			
98.80 %				
Euro Efficiency				
98,30 %				



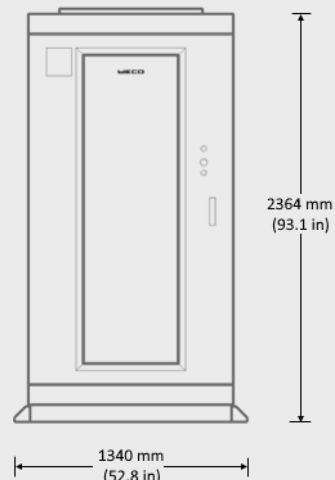
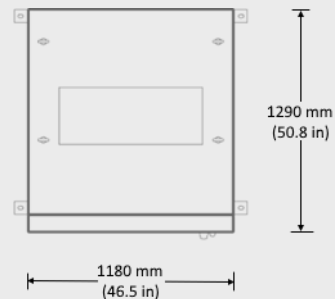
*20kW for reference

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ALL-IN-ONE ENERGY STORAGE SYSTEM

ENERGY STORAGE SYSTEM Specifications

INVERTER	Inverter Power* see datasheet for Details	25~100 kW
	Max PV Input Voltage	850 VDC
	Inverter Charging Current	100 ADC
	Inverter AC Output	400 Vac @ 50 Hz
	Max. DoD	90%
BESS	Rated Capacity	107 kWh
	Cabinet Max. Slots (Standard)	14 + 2 HVBOX
	Rated Voltage	716.8 Vdc
	Voltage Range	635 ~ 807 Vdc
	Max. Discharge/Charge Current 1C	1C (150 A)
	Recommended Discharge/Charge Current (Long Cycles)	0.5C (75 A)
	System Short Circuit Current	7000 A
	Battery Short Circuit System	6800 A
	HV BOX Fuses Protection	1000 V – 200 A On Both Poles
	HV BOX Manual Breaker	1500 V – 200 A Type C Automatic Thermal Protection
CYCLES	HV BOX Contactor Rating Current	350 A On Both Poles
	Cabinet Max. Elevation	3000 m
	Number Of Cycles 0.5C	≥ 7000 (0.5C, 90% DOD ,70% SOH)
COMMUNICATION	Number Of Cycles 1C	≥ 4700 (1C, 90% DOD, 70% SOH)
	Battery To Inverter Communication	CAN
	AUX Data Communications-Modbus	RS485
	APP Connectivity	WeCo NooR App
BMS PROTECTIONS	Cloud Platform	LAN + 4G
	SOC Alerts	Built-in
	Cell Over - And Under-Voltage Protection	Built-in
	Overload Protection	Built-in
	High Temperature Alarm	Built-in
PASSIVE PROTECTIONS	External Stop Button (Contactor Disconnection Impulse)	Built-in
	Smoke Alarm	Built-in
	Top Windows Pressure Release	Built-in
	Fire Detection Sensor	Built-in
	Fire Fighting System/Gas Suppression Aerosol	Built-in
SHELF-LIFE ENVIRONMENT	DC Protection	Built-in
	Storage Max. Humidity	RH ≤95% (No Condensation)
	Storage Temperature	Less than 3 months: 0 ~ 45 °C (SOC: 20% ~ 50%)
	Shelf Life Without Inspections	> 3 months: 15 ~ 35 °C (SOC: 20% ~ 50%)
BASIC PARAMETERS	Storage Elevation	≤ 3000 m
	Dimensions (W x D x H) (mm)	1140 x 1190 x 2300
	Weight	1650 kg
	Cabinet Design Working Temperature Range	-20 °C +45 °C (Derating due to Defrost Cycles to be considered)
	Recommended Operative Temperature Range	-10 °C +45 °C (Derating ad Defrost Cycles to be considered during operations, could cause power reductions)
	Defrost Coil Resistor For Extreme Low Temperature	220V AC Heating Resistor For Defrosting Function (Optional)
	IP Rating	IP54
	Cooling Method	Heat Pump and Air conditioner
	A/C Stand By Consumption (Inactive Compressor Status Via EMS)	50 W
	A/C Max. Cooling Power	1200 W
A/C Max. Heating Power	2500 W	
A/C Consumption With Compressor OFF And Fan Running For Air Circulation Only	250 W	
HV BOX Self Consumption	15 W	
HV BOX Consumption With All Fan Running Full Speed	75 W	
Energy Saving Programming Mode	Scheduling via EMS for Full Energy Saving	
Coating	Standard Outdoor Painting	
Shipping Method	Batteries to be installed on site	



The above-mentioned temperatures are limited to the BMS ranges, such values may not be covered by the performance warranty.
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