

LIFE BATTERY SYSTEM 48-100 (ESS)

- Compact size and lightweight
- The modular design allows easy expansion for the future, **up to 10 units** (50kWh in total)!
- **Fast Charging** (Lithium-Ion Technology)
- 6000-8000 charge cycles, are approximately 14-18 years product life
- Works with all our solar Inverters, **one ESS for all!**
- Linear Back-up times (Lithium-Ion Technology)
- 50% more discharging ability, up to 150A
- 192A peak discharging capability (1min long)

The PowerWalker LiFe Battery System is a modular and scalable lithium-ion battery pack, suitable for all our solar inverters. The energy storage system, or ESS, is lightweight and compact. It charges at a high rate, and it is designed to last between 6000-8000 charge cycles; perfect for long term projects. The lithium-ion technology guarantees safety and reliability. The back-up time behaves in a linear fashion, so you will always know what to expect!



ESS Module	LiFe Battery System			
Battery Cell Technology	Lithium Iron Phosphate			
Applicable Inverter Rating	≤ 5.6kW			
Number of Modules	1	2	3	4
Usable Energy	5kWh	10kWh	15kWh	20kWh
Rated Discharging Current	150A			
Peak Discharging Current	192 A, 1 min			
Nominal Voltage	51.2 V			
Operating Voltage	38-56VDC			
Charging Current	100A Max, 30A Default			
Dimensions D x W x H (mm) without feet	185 x 540 x 320	185 x 540 x 640	185 x 540 x 960	185 x 540 x 1280
Net Weight (kg)	48	96	144	192
With PDU on top	LiFe Battery System with PDU			
Applicable Inverter Rating	6 - 12kW			
Number of Modules	2	3	4	
Number of PDU Module	1			
Usable Energy	10kWh	15kWh	20kWh	
Rated Discharging Current	300A			
Peak Discharging Current	384 A, 1 min			
Net Weight	102	150	198	
General Specifications	Values			
Operation Temperatur	0°C-50°C			
IP Protection	IP20 (Only indoors)			

ONE ESS FOR ALL!

The ESS, together with our solar inverters will function as a centralized power solution:

1. store solar power into the batteries,
2. save money by using the stored energy for self-consumption (night-time), and
3. use it as a power back-up when the power grid fails.

Works with all PowerWalker solar solutions - One ESS for all!

The battery system can be discharged with a maximum current of 150A. Above 150A, it is required to use the PDU for the LiFe battery system.

ESS Module



PDU Module



Under **optimal conditions** and usage, the ESS can have a lifespan of **8000 charge cycles** (60% DOD at 1C discharging current and 0.2C recharging current with >50% capacity compared to original capacity), and under **normal conditions** and usage, the ESS can have a lifespan of **6000 charge cycles or less** (90% DOD at 1C discharging current and 0.2C recharging current with >80% capacity compared to original capacity).

Back-Up Examples (Lithium-Ion Compound = Linear Back-up)

Load	1 Module	2 Modules	3 Modules	4 Modules
5 kWh	54 min	108 min	162 min	216 min
10 kWh	27 min	54 min	81 min	108 min
2,5 kWh	108 min	216 min	324 min	432 min