

HYBRID ENERGY STORAGE SYSTEMS

# WiStorage | HESS

POWER RATING  
**6kW**



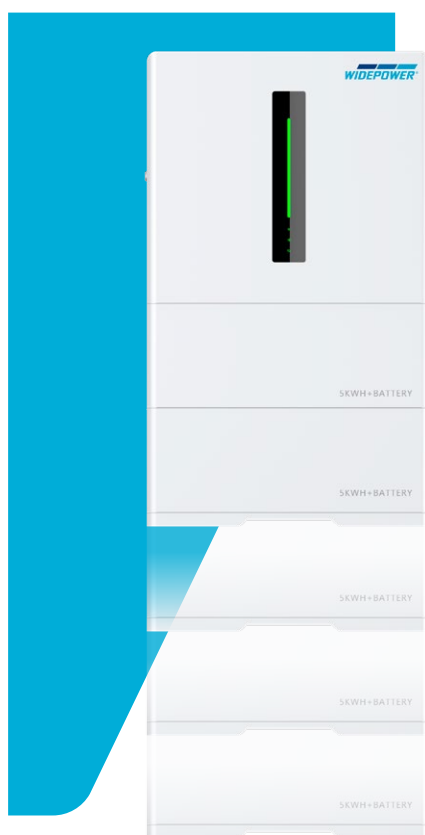
Smart  
energy for your  
home, autonomy  
for your future.





### MAIN FEATURES

- Hybrid system with intelligent power management;
- Stacking design for easy installation;
- Module plug-and-play, automatic recognition;
- Flexible expansion of battery capacity;
- Security and stability, 24-hour intelligent monitoring;
- Integrated streamlined case design with elegant appearance;
- IP66 stainless steel enclosure, waterproof and dustproof;
- Flexible setting of multiple working modes according to preferences;
- Seamless switching of emergency mode to ensure that loads do not power down.



up to 30kWh

Hybrid residential energy storage systems are solutions that combine advanced battery technology with intelligent power management, ensuring reliable energy availability and efficient utilization.

These systems integrate renewable sources, with the grid, enabling homeowners to store excess energy for later use and optimize consumption patterns.

Hybrid storage has proven to be an effective approach to reducing reliance on the grid while providing protection against power outages and fluctuations.



Online  
Double  
Conversion



DSPi  
Precise Control



BMS  
Battery



Insulated  
Coating Tech



ECO  
High-Efficiency



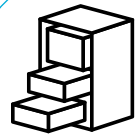
Hybrid energy storage systems are designed to meet the growing demand for sustainable, resilient, and cost-effective home energy supply.

Smart, compact, and versatile. Hybrid storage units are built with modular architectures, making them easily adaptable to different household sizes and energy needs.

Key parameters can be monitored through intuitive interfaces.

The increasing penetration of renewable energy, alongside the volatility of modern electrical grids, has accelerated the need for hybrid energy storage systems.

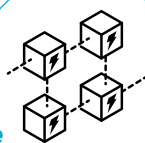
These systems guarantee uninterrupted power, optimize self-consumption, and deliver long-term savings, all while supporting the transition to a cleaner and more sustainable energy future.



**Flexible,  
Plug & Play  
Solution**



**Smart  
management and  
easy monitoring**



**Scalable**

**SYSTEM**
**Technical Specifications**

<b>System Components</b>	1 battery module	2 battery modules	3 battery modules	4 battery modules	5 battery modules	6 battery modules
<b>System Capacity</b>	5,12 kWh	10,24 kWh	15,36 kWh	20,48 kWh	25,6 kWh	30,72 kWh
<b>Capacity of each Module</b>	5 kWh					
<b>Number of Inverters</b>	1					
<b>Nominal Power</b>	6000 W					
<b>Dimensions (WxHxD) (mm)</b>	600×778×305	600×998×305	600×1218×305	600×1438×305	600×1658×305	600×1878×305
<b>Weight (kg)</b>	93	143	193	243	293	343
<b>Noise Level (1.m)</b>	<25 dB					
<b>Cooling Type</b>	Natural Cooling					
<b>Maximum Altitude</b>	4000 m					
<b>Operating Temperature</b>	-20 °C ~ +58 °C					
<b>Protection Level</b>	IP66					
<b>Instalation Method</b>	Floor Mount					
<b>Operating Humidity</b>	0 ~ 100% (non-condensing)					
<b>Screen</b>	LED & APP					

**INVERSOR**
**Photovoltaic Input**

<b>Maximum Input Power</b>	8000 W
<b>Maximum Input Voltage</b>	550 Vdc
<b>Nominal Input Voltage</b>	360 Vdc
<b>Minimum Starting Voltage</b>	100 Vdc
<b>Minimum Operating Voltage</b>	150 Vdc
<b>MPPT Range</b>	100–540 Vdc
<b>PV Maximum Input Current</b>	16 A / 16 A
<b>Maximum Short-circuit Current</b>	24 A / 24 A
<b>Number of Independent MPPT</b>	2
<b>Number of Input Strings in each MPPT</b>	1/1

**Battery Input**

<b>Battery Type</b>	Lithium Batteries
<b>Battery Voltage Range</b>	42–58 Vdc
<b>Maximum Load Current</b>	100 A
<b>Maximum Discharge Current</b>	120 A
<b>Load Curve</b>	3 Steps / Equalization
<b>Charging Strategy</b>	BMS automatic adaptation

**AC Output - Grid**

<b>Nominal Output Power</b>	6000 W
<b>Maximum Output Apparent Power</b>	6000 VA
<b>Grid Type</b>	Single-Phase
<b>Grid Connection</b>	1/N/PE
<b>Input Voltage Range</b>	184–276 Vac
<b>Input Frequency Range</b>	50±5 Hz / 60±5 Hz
<b>Maximum Input Current</b>	40 A
<b>Nominal Output Voltage</b>	220 Vac / 230 Vac
<b>Nominal Output Frequency</b>	50 Hz / 60 Hz
<b>Nominal Output Current</b>	27,3 A / 26,1 A
<b>Maximum Output Current</b>	27,3 A
<b>Power Factor</b>	>0,99
<b>THDi</b>	≤3 % (full load)

**AC Output - Loada**

<b>Nominal Output Power</b>	6000 W
<b>Maximum Output Apparent Power</b>	6000 VA
<b>Load Connection</b>	1/N/PE
<b>Output Nominal Voltage</b>	230 Vac (208/220/240 Vac selectable)
<b>Output Nominal Frequency</b>	50 Hz / 60 Hz
<b>Output Nominal Max. Current</b>	27,3 A / 26,1 A
<b>THDv</b>	≤3 % (linear load)
<b>Transfer Time</b>	≤10 ms

**Efficiency**

<b>Maximum Efficiency</b>	97,80%
<b>MPPT Efficiency</b>	99,90%

**Protections**

Grid Overvoltage, Grid overfrequency and underfrequency, Grid overload, Anti-Islanding Protection, Output Short-circuit protection

<b>Overvoltage Protections</b>	DC Type II / AC Type III
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**Standards**

<b>Security Standards</b>	IEC/EN 62109-1/-2
<b>EMC</b>	EN 61000-6-1/-2/-3/-4
<b>Grid Connection</b>	CEI 0-21, DIN VDE 0124-100:2020, VDE-AR-N 4105:2018, NRS097-2-1, EN 50549-1, G99/1-2920Z, ETSI EN303645+PSTI, C10/11:2021 XP, C15-712-3:2019, ELOT EN 50549-1:2019, PEA

**Physical Specifications**

<b>Dimensions (WxHxD) (mm)</b>	600 x 530 x 305
<b>Weight (kg)</b>	36,4 kg

**MÓDULOS DE BATERIAS**
**Módulos de Baterias**

<b>Cells Technology</b>	LiFePO4
<b>Module Capacity</b>	5,12 kWh
<b>Maximum Modules Number</b>	6
<b>Depth of Discharge (DOD)</b>	Máx. 100% (selectable)
<b>Maximum Load Power</b>	3,84 kW
<b>Maximum Discharge Power</b>	5,02 kW
<b>Maximum Load Current</b>	75 A
<b>Maximum Discharge Current</b>	98 A
<b>Communication Interfaces</b>	485 e CAN
<b>Standards</b>	IEC 62619, IEC 60730, UN 38.3, IEC 62040-1, ROHS2.0, VDE 2510-50