



/ HS-BMS-20 / HS-BM-4.71-20 / HS-BU-20

preliminary



SMA Home Storage-US

Ease of installation. Long lifetime.
Seamless integration.



Future-proof electricity storage system

- Designed for intensive use, ensuring the system is ready to meet the demands of energy needs
- Grid Services Ready: Virtual Power Plant (VPP) and Demand Response (DR)
- For immediate off-grid backup response, must be paired with SMA Backup Start module
- 8,000 life cycles and 12.5-year warranty

Easy installation, fast commissioning

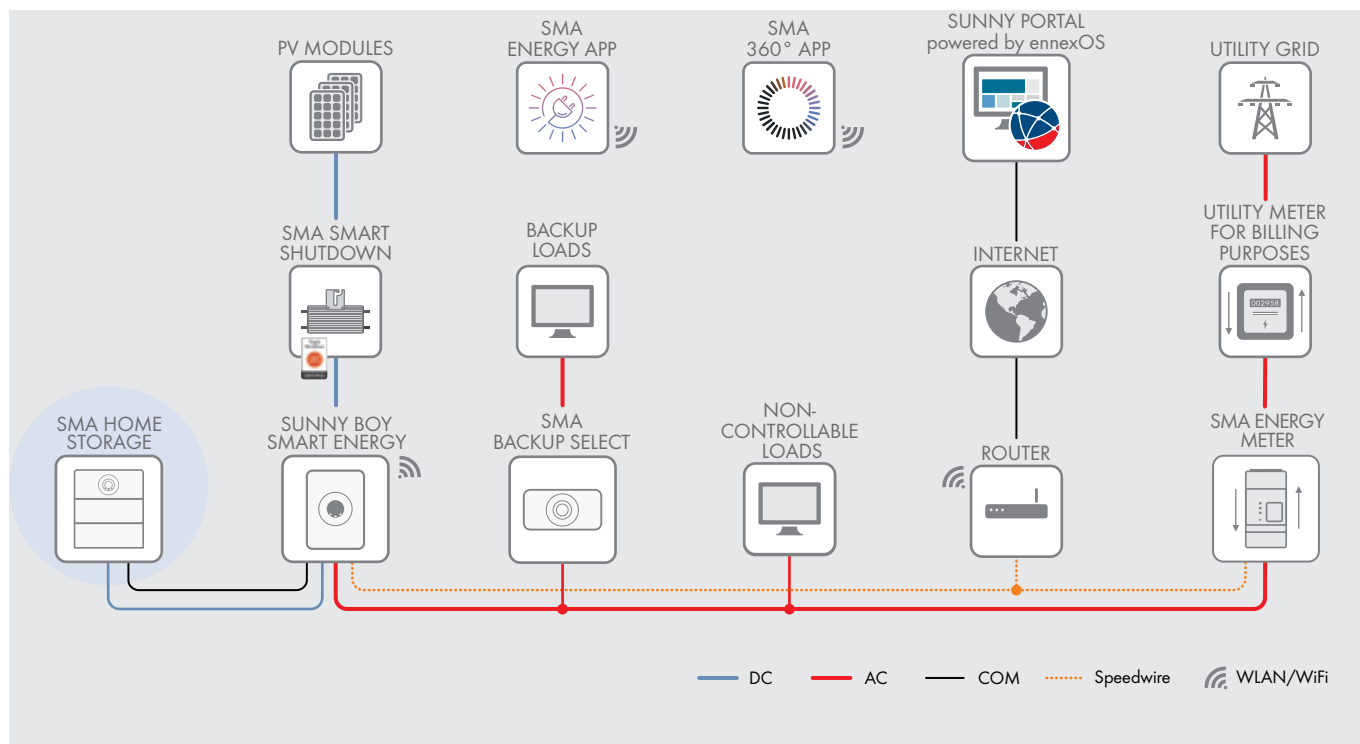
- Plug-and-play solution and quick commissioning through the SMA 360° App
- Expandable capacity available
- Proprietary mounting simplifies servicing without the need to remove modules

Unmatched flexibility

- Compatible with SMA Sunny Boy Smart Energy hybrid inverter
- Slim, stackable design expandable from 9.4 kWh to 18.9 kWh
- Flexible mounting options: wall-mounted or floor installation
- IP65- rated for durable indoor or outdoor use
- Parallel connection supports up to 4 battery stacks, offering a total usable capacity of up to 75.44 kWh

The SMA Home Storage Solution empowers homeowners to unlock the full potential of sustainable energy. By integrating the SMA Home Storage battery, you can generate and store power all from a single source. It perfectly complements the SMA Sunny Boy Smart Energy hybrid inverter, enabling comprehensive energy solutions for both today and tomorrow.

Rain or shine, the SMA Home Storage battery stores solar energy efficiently, ensuring your home always has the power it needs. Designed with flexibility in mind, this system can be tailored to fit your specific energy demands and boasts a remarkable lifespan of up to 8,000 charging cycles. By choosing the SMA Home Storage battery, you're investing in quality and security, supported by a reassuring 12.5-year warranty.



Technical data	SMA Home Storage-US 9.4	SMA Home Storage-US 14.2	SMA Home Storage-US 18.9
Electrical data			
Usable energy capacity ¹⁾	9.43 kWh	14.15 kWh	18.86 kWh
Nominal voltage DC	192 V	288 V	384 V
Operating voltage range DC	168 V to 216 V	252 V to 324 V	336 V to 432 V
Charge / discharge power	9.04 kW ³⁾	13.57 kW ³⁾	18.09 kW ³⁾
Peak charge / discharge power (at 25 °C, 5s)	10.68 kW ³⁾	16.02 kW ³⁾	21.36 kW ³⁾
Continuous charging / discharging current	up to 52 A ³⁾		
General data			
Dimensions ²⁾ (W/H/D)	37.4 x 7.5 x 43.3 inch / 950 x 190 x 1100 mm	37.4 x 7.5 x 56.9 inch / 950 x 190 x 1445 mm	37.4 x 7.5 x 70.5 inch / 950 mm x 190 x 1790 mm
Wall mounting system weight	306 lb/ 139 kg	430 lb/ 195 kg	555 lb/ 252 kg
Floor standing system weight	319 lb/ 145 kg	444 lb/ 201 kg	568 lb/ 258 kg
Operating temperature discharging / charging	14 °F to 122 °F (-10 °C to 50 °C) / 32 °F to 122 °F (0 °C to 50 °C)		
Self-consumption (at night) per module	BMS: 10 W / Battery Module (each): 1.5 W		
Degree of protection (according to IEC 60529)	IP 65 / Type 3R		
Max. permissible value for relative humidity (non-condensing)	5% to 95%		
Cell technology	Lithium Iron Phosphate (LiFePO4) / LFP		
Efficiency			
Battery efficiency	up to 95.8% @ 0.2 °C charge / discharge 25 °C / 77 °F with 4 battery modules		
Protective devices			
Input-side disconnection point	●		
DC reverse polarity protection	●		
Overvoltage category battery / inverter	II / II		
Equipment			
DC connection	Amphenol (H4PFM8DM)		
Interface / Communication	RJ45		
Communication protocols	SMA battery interface		
Warranty	12.5 years		
Certificates and permits (more available upon request)	UL 9540 AC System certification, UL 9540A, FCC Part 15 Class B, ICES 003 Class B, Type 4x rating, IEC 60529, IEC 62262, UN38.3, AC156, IEEE693		
Compatible SMA products	Sunny Boy Smart Energy-US (SBSE-US-50)		
Accessories	Base unit for floor mounting (HS-BU-20)		
Type designation	1 x HS-BMS-20 2 x HS-BM-4 71-20	1 x HS-BMS-20 3 x HS-BM-4 71-20	1 x HS-BMS-20 4 x HS-BM-4 71-20

● Standard equipment Data at nominal conditions Last revised: 09/2024

1) Under specific test conditions (100% DOD, 0.2 C charge and discharge at +25 °C).

2) Dimensions and weight without mounting devices. Dimension including wall mounting device and base unit can be found in the product manual.

3) Operation value depending on the connected inverter (see technical data of the inverter).