Battery
Brick

Modular Storage Unit

The Solarnative BatteryBrick is a safe AC battery storage unit based on our unique single-cell technology. The modular storage system can be configured with a variable number of independent batteries and provides full off-grid back-up capability.

Key Features

Modular system
Freely configurable 1-phase or 3-phase system with 0.9 to 32.4 kWh
Flexible spatial arrangement – fits everywhere

Safe by design and built to last
Unique single-cell high-frequency technology controls each battery cell individually
No cell mismatch – avoids overheating and ensures maximum lifetime

Superior efficiency range
Smart and modular charging/discharging power from 375 W to 13.5 kW
Highest efficiency even at low power consumption

Full back-up capability
Provides full 3-phase back-up and off-grid functionality
Gridforming

Easy installation
No data cables
Plug & Play over-the-air commissioning
Lightweight

System Configuration

The Solarnative BatteryBrick is available in two versions: with 0.9 and 1.8 kWh usable energy. Each BatteryBrick includes its own independent bidirectional inverter.

Various batteries can be combined to form up to 4.6 kW (20 A) charging/discharging power per phase. Thanks to the flexible arrangement, the battery storage fits into every corner.

Each battery system requires a battery control unit (BCU) that controls the connected BatteryBricks using power-line communication. The BCU is integrated into the Solarnative Smart Energy Home system via LoRa wireless communication.

Within the Solarnative Smart Energy Home, at least one IntelliGate is required to manage the complete system. A Solarnative PowerMeter is recommended to measure the power at the grid connection point.

Technical Data

Battery	BB-0.9	BB-1.8
Battery cell chemistry	Lithium Iron Phosphate (LiFePo), cobalt-free	
Usable Energy	0.9 kWh	1.8 kWh
Nominal voltage	230 V @ 50 Hz / 240 V @ 60 Hz	

Output (AC)	BB-0.9	BB-1.8
Continuous charging / discharging power (at 240 V)	375 W	750 W
Round trip efficiency	> 85 %	
Nominal voltage	230 V @ 50 Hz / 240 V @ 60 Hz	
Current	Max 1.6 A	
Overvoltage Class	II	
Nominal frequency	50-60 Hz	

System	BB-0.9	BB-1.8
Maximum number of ACB modules per phase (3-phase)	12 (36)	6 (18)
Maximum charging/discharging power per phase (3-phase)	4.6 kW (13.5 kW)	
Maximum current per phase	20 A (self-limiting)	
Maximum usable storage capacity per phase (3-phase)	10.8 kWh (32.4 kWh)	

Communication	BB-0.9	BB-1.8
Communication with BCU battery control unit	Power-line communication	
Communication from BCU to Smart Gateway SGW-1	LoRa WAN wireless	
Commissioning	Via Solarnative app	

General Data	BB-0.9	BB-1.8
Dimensions (length x width x height)	125 mm x 200 mm x 250 mm (4.9 in x 7.9 in x 9.8 in)	250 mm x 200 mm x 250 mm (9.8 in x 7.9 in x 9.8 in)
Weight	7 kg (247 oz)	14 kg (494 oz)
Cooling	Natural convection	
Ingress protection	IP55	
Noise emission	< 40 dB	