



BPZ Cube 60

Compact **energy storage**
air-cooled



The ultimate all-in-one solution for residential and commercial applications. Energy storage with a hybrid three-phase inverter allows direct connection with a photovoltaic installation and optional charging of electric vehicles via an integrated AC charger.



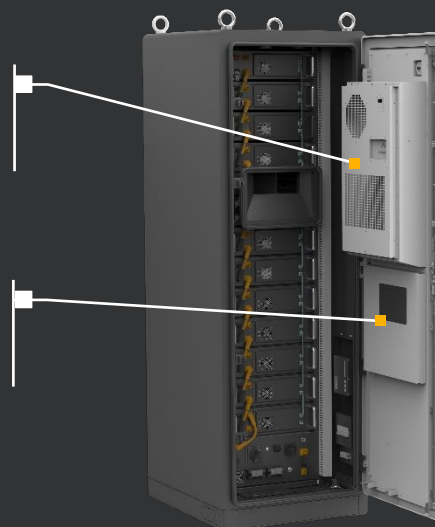
Three-phase hybrid inverter (option
- AC charger)

Precision air conditioning

Battery module

Controller

Main control unit



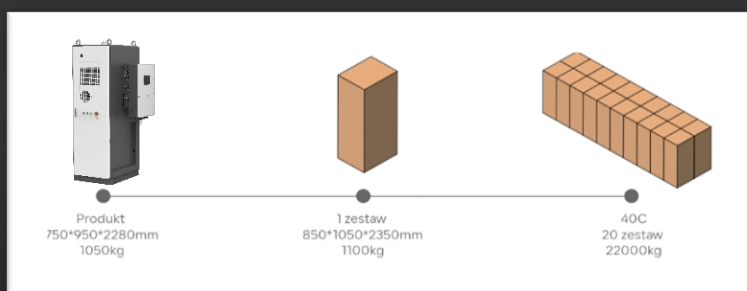
Compact chassis: standardised all-in-one design provides large storage capacity in a small footprint. System scalability by combining multiple units into a single system.

Safety and reliability: advanced temperature control features, an integrated fire safety system and an integral management system ensure maximum operational safety and reliability.

High performance and longevity: an advanced manufacturing, testing and quality control process, using the latest LiFePO_4 cells, guarantees long-lasting performance of up to 8,000 cycles.

Functionality and maintenance: integrated full EMS enables complete operation in user, service and manufacturer mode. The optional EV charger in combination with energy storage can operate at full capacity regardless of the connection power. In combination with tariffs allowing price arbitrage, significant savings can be generated.

■ Packaging and shipping details



Battery energy storage	
Cell type	LiFePO4 / 100 Ah
Nominal volume	61.44 kWh
Nominal voltage of the module	51,2 V
System nominal voltage	614,4 V
Operating voltage range	562.5÷ 681.6 V
Depth of discharge (DoD)	80%
Lifespan	8000 cycles
Charge/discharge rate	≤0,5C
Charge/discharge current	100 A
Scalability	4 modules per section, ~240 kWh
Cooling type	Air cooling (precision air conditioning)
Type of converter	Hybrid inverter
Fire protection system	Aerosol extinguishing
AC output	
Rated AC output power	50 kW
Maximum AC output power	50 kVA
Rated output voltage	400 VAC
Output voltage range	-15%÷ 10% (adjustable)
Rated mains frequency	50/60 Hz
Maximum mains input power	50 kW
Maximum mains output current	76 A
Rated mains voltage	3 / N / PE, 230 V / 400 V _{VAC}
Power factor	0.8 advance÷ 0.8 delay
THDi	< 3%
AC output (spare)	
Rated output power	50 kW
Maximum AC output power	50 kVA
Maximum output power	1.5 times / 10 s
Rated output current	76 A
Switching time	<10 ms
Maximum transient current	150 A
THDv (under linear load)	< 2%
PV output	
Maximum input power	90 kW
Maximum input voltage	1100 V
Starting voltage	200 V
Rated voltage	620 V
MPPT voltage range	180÷ 1000 V
Number of MPPT	4
Number of strings per MPPT	8
Maximum current per MPPT	40 A
Maximum short-circuit current per MPPT	60 A

EV charging system (optional)	
Charging type	Charging mode 3, Case B and Case A
Socket options	AC Type 2 (IEC 62196-2)
Input/output current	32 A, three phases
Input/output power	23 kW at 415 VAC
Input/output voltage	380-415 VAC
Input frequency	50/60 Hz
Cable length	5.0 m, option: 7.5 m
Distribution system	TT, TN system
Connector type	3P+ N+ PE
Certificates	IEC/EN 61851-1, IEC 61851-21-2, IEC 62196-1 IEC 62196-2, IEC 62109
General parameters	
Dimensions (W x D x H)	750x950x2280 mm / 29.5x37.4x89.7 inches
Total weight	1050 kg / 2314.8 lbs
Working height	2000 mm / 6561 ft
Degree of protection	IP55
Permissible operating temperature	-20°C ÷ 50°C
Storage conditions	-20°C ÷ 35°C 5% ÷ 85% relative humidity, non-condensing Initial SoC: 50%
Systems	BMS, EMS
Communication	CAN, RS485, Wi-Fi, LTE
Warranty on cells	10 years, extension payable from 11 to 15 years.
Device warranty	4 years included, extension payable from 5th to 10th years
Certificates	UL1973, UL9540A, UL9540, UN38.3, MSDS

■ Application possibilities



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