

EnerBrick-3.0 Outdoor ESS Cabinet

1. Plug-and-Play for ready to use.
2. All-in-One integrated modular design.
3. DC coupled for solar accessing.
4. Unbalanced loads operation.
5. Multiple fire-fighting methods
6. Virtual Power Plant (VPP) enabled.
7. Grid Ancillary Services .



5 layers Safety Design
Much safer
More reliable.



Response <200ms
Applied for grid
Ancillary service.



Multi Energy Accessing
Solar, diesel generator,
wind turbine, etc.

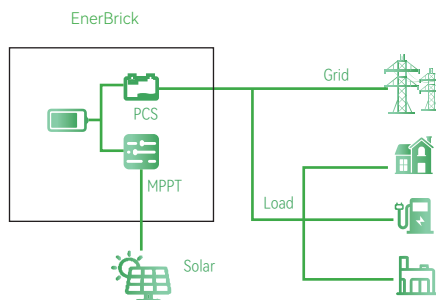


More Availability
All-in-one design +
Partition management.

APPLICATIONS

EnerBrick3.0 is a compact and Plug-and-Play battery energy storage system with easy to be transported, installed and maintained. It is an All-in-One system comprises of PCS, batteries, BMS, EMS, MPPT, automatic fire control system and temperature control system.

High-performance EV grade LiFePo4 batteries ensures high safety and reliability with four layers of security architecture with intelligent BMS design. The synergy of the system components and unique design enable to achieve effective charging and discharging for various applications with high energy density and maximized battery life time to provide the lower LCOS. It supports AC Coupling and DC coupling applications with its ease in integration and suitable for all ranges of C&I energy storage projects.



Factory, Office Park, Hotel, Farm.
TOU arbitrage, peak power shaving



EV Charging Station
Power extension, solar benefit maximization



Microgrid
Multi-energy integration with solar, diesel generator, wind turbine, etc.



Distribution Network Operator (DNO)
Grid ancillary service, VPP

System Parameters

Model	P120M0-241K	P60M0-241K	P60M0-221K	P60M0-200K
DC Side Parameters				
Cell type	LiFePO4 - 314Ah			
Module model	1P20S			
Battery capacity range	241kWh	241kWh	221kWh	200kWh
On-Grid AC Side Parameters				
Grid connection type	3P4W			
Charging/discharging power	120kW	60kW	60kW	60kW
Grid voltage range	AC400 (±15%) V			
Frequency range	50(±5)Hz			
Rated AC output current	173A	87A	87A	87A
Power factor	0.8 (Leading) ~ 0.8 (Lagging)			
Harmonics	≤3% (at rated power)			
Off-grid AC Side Parameters				
Load type	3P4W			
Rated output power	120kW	60kW	60kW	60kW
Rated output voltage	AC400V±1%			
Rated output frequency	50Hz			
Rated current	173A	87A	87A	87A
General Parameters				
Dimensions (W*H*D)	1686mm*2093mm*1392mm			
Maximum weight	2600kg			
Protection grade	IP55 (Battery Cabin) IP54 (Electrical Cabin)			
Cooling method type	Battery Cabin (air conditioner) & Electrical Cabin (forced air cooling)			
Fire fighting system	Combustible gas detection + Water fire protection + [optional] Aerosol fire extinguisher			
Anti-corrosion grade	C3			
Relative humidity	0-95% (non-condensing)			
Operating temperature*	-30°C~50°C			
Altitude**	<3000m			
Noise level	≤65dB (3m)			
Communication interface	RS485, Ethernet			
Communication protocol	Modbus RTU, Modbus TCP/IP			
Product standard warranty	5-Year Product Warranty			
Product lifetime	8000 cycles, 70%EOL, 25°C			
PV Side Parameters (Optional)				
Maximum PV input power	30kW/60kW/120kW			
Input Voltage to MPPT	300V-800V (<241kWh) ; 300V-680V (=241kWh)			
Number of MPPTs	1/1/2			
Number of PV inputs	1/1/2			
Maximum input current	100A/200A/400A			
Certifications	System: CE(IEC61000,IEC62477),UN3480, CEI021,CEI016, VDE2510, RoHS, IEC62933 Converter: G99, VDE4105, EN50549-1, EN50549-2, AS/NZS 4777, CE(IEC61000, IEC62477) , IEC62109, NC RfG, NRS097,VDE4110, R25&TOR, C10/11,EIFS2018,etc. Cell: IEC62619, UL1973, UL1642, UL9540A PACK: UN38.3			

* The system will be derated when the ambient temperature exceeds 45°C.

** The system will be derated when the altitude exceeds 3000m. For every 100m increase in altitude, the system will be downgraded by 5%.

System Parameters

Model	P60M0-180K	P30M0-241K	P30M0-221K	P30M0-180K
DC Side Parameters				
Cell type	LiFePO4 - 314Ah			
Module model	1P20S			
Battery capacity range	180kWh	241kWh	221kWh	180kWh
On-Grid AC Side Parameters				
Grid connection type	3P4W			
Charging/discharging power	60kW	30kW	30kW	30kW
Grid voltage range	AC400(±15%)V			
Frequency range	50(±5)Hz			
Rated AC output current	87A	43A	43A	43A
Power factor	0.8 (Leading) ~ 0.8 (Lagging)			
Harmonics	≤3% (at rated power)			
Off-grid AC Side Parameters				
Load type	3P4W			
Rated output power	60kW	30kW	30kW	30kW
Rated output voltage	AC400V±1%			
Rated output frequency	50Hz			
Rated current	87A	43A	43A	43A
General Parameters				
Dimensions (W*H*D)	1686mm*2093mm*1392mm			
Maximum weight	2600kg			
Protection grade	IP55 (Battery Cabin) IP54 (Electrical Cabin)			
Cooling method type	Battery Cabin (air conditioner) & Electrical Cabin (forced air cooling)			
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Relative humidity	0-95% (non-condensing)			
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Product standard warranty	5-Year Product Warranty			
Product lifetime	8000 cycles, 70%EOL, 25°C			
PV Side Parameters (Optional)				
Maximum PV input power	30kW/60kW/120kW		30kW/60kW	
Input Voltage to MPPT	300V-800V (<241kWh) ; 300V-680V (=241kWh)			
Number of MPPTs	1/1/2		1/1	
Number of PV inputs	1/1/2		1/1	
Maximum input current	100A/200A/400A		100A/200A	
Certifications	System: CE(IEC61000,IEC62477),UN3480, CEI021,CEI016, VDE2510, RoHS, IEC62933 Converter: G99, VDE4105, EN50549-1, EN50549-2, AS/NZS 4777, CE(IEC61000, IEC62477) , IEC62109, NC RfG, NRS097,VDE4110, R25&TOR, C10/11,EIFS2018,etc. Cell: IEC62619, UL1973, UL1642, UL9540A PACK: UN38.3			

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