Integrated Outdoor Battery Energy Storage Cabinet

Epoch-S100/215/120-W-WL





^{*}The appearance of the product is for reference only, and the final delivered product shall prevail

PRODUCT APPLICATIONS



Peak Shaving



Grid Support Services



Time-of-Use



Energy Arbitrage



Renewable Energy Integration

PRODUCT FEATURES

- Plug-and-Play for ready to use
- Compact with modular design
- Parallel operation up to 60Nos
- Unbalanced loads operation
- Support with solar

- MPPT for PV input (Optional)
- Virtual Power Plant enabled
- > IP55 grade, suitable for outdoor
- Intelligent remote monitoring
- Product standard warranty: 5 years

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PRODUCT OVERVIEW

Epoch-S100/215-W-WL 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 safety protection 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.

PRODUCT PARAMETERS

Model	Epoch-S100/215/120-W-WL
Battery Parameters	-
Battery cell type & capacity	LiFePO ₄ - 280Ah
Module model	IP20S
Battery storage capacity range	215kWh
AC Side Parameters	
Grid connection type	3P4W
Charging / discharging power	100kW
Rated grid voltage	AC 400V
Grid voltage range	±15%
Frequency range	50 (±5) Hz
Rated AC output current	144A
Power factor	0.8 (Leading) ~ 0.8 (Lagging)
Harmonics	≤3% (at rated power)
General Parameters	
Dimensions (W*H*D)	1686mm*2093mm*1354mm
Maximum weight	2500kg
Degree of protection	IP55 (Battery Cabinet) IP54 (Electrical Cabinet)
Cooling method type	Battery Cabinet (air conditioner) & Electrical Cabinet (forced air cooling)
Fire fighting system	Combustible gas detection + Novec1230 + water fire protection
Anti-corrosion grade	C3
Relative humidity	0-95% (non-condensing)
Altitude**	< 2000m
Operating temperature*	-20℃ ~ 50℃
Noise level	≤75dB
Communication interface	RS485, Ethernet
Communication protocol	Modbus RTU, Modbus TCP/IP
Product standard warranty	5 years, 6000 cycles 0.5C, 95%DOD, EOL:70%, (can be extended up to 10 years)
PV Side Parameters	
Maximum PV input power	120kW
MPPT voltage range	200V-850V

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Number of MPPTs	2
Number of PV inputs	2
Maximum input current	400A

- * The system will be derated when the ambient temperature exceeds 45°C.
- ** The system will be derated when the altitude is between 2000 and 3000m.

Certifications:

Epoch System: CE (IEC61000, IEC62477), IEC62619, CEI021(on going), CEI016(on going), VDE2510(on going);

Battery Cell: IEC 62619, UL1973, UL1642, UL9540A;

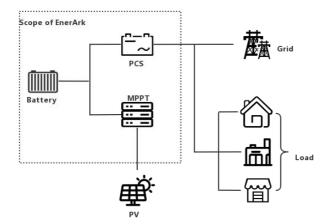
Battery Pack: UN38.3;

PCS: G99, VDE4105, EN50549, AS/NZS 4777, CE(IEC61000, IEC62477), IEC62109, NC RfG, NRS097, VDE4110(on going)

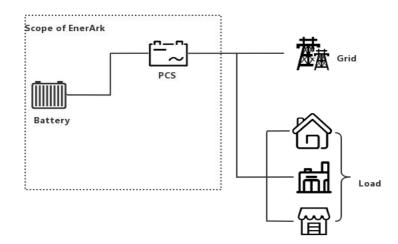
Note: Product specifications are subject to change without any prior notice as per regular modifications made by company.

TOPOLOGY MAP

On-grid /Off-grid& PV:



On-gird/Off-grid:



www.leoch.com