



ChenXiong Mac-Elec Co., Ltd

PRODUCT BROCHURE



PowerX series



Help households maximize the use of renewable energy such as photovoltaic and wind power, increase the proportion of self-generation and self-consumption, balance the electricity load, save household electricity expenses, and improve the reliability of household power supply.



PowerX MINI

Portable Power Station

- Blazing-fast charging
- High energy and durability
- Compact and Portable

PowerX W5

Low voltage wall mounted battery

- thin and elegant
- Reliable waterproof
- Easy to setup

PowerX S5

High voltage stacked battery

- Quick Stacking
- Flexible configuration
- Highly compatible

PowerX 1 PLUS

Single-phase All-in-one

- Flexible configuration
- Quick installation
- Safe and Efficient

PowerX E5

Low-voltage rack battery

- Proven and reliable
- Extreme flexibility
- Economic safety

PowerPLANT series



It can flexibly match various industrial and commercial scenarios, which can effectively solve the pain points of industrial and commercial users, such as high electricity cost, unstable power generation, difficult capacity expansion, high expansion investment, and long cycles, and can realize peak-to-valley time shifting, off-peak power consumption, and alleviate the pressure on the power grid.



PowerPLANT 370/410

Outdoor liquid cooled battery cabinet

- High volume and long-lasting
- Adaptable
- Extreme protection



PowerPLANT 230

Outdoor liquid cooled energy storage
Converged cabinet

- Ultimate Safety
- Profits Evergreen
- Effortless Website Construction

Power**STROM** series



In view of the randomness, volatility and indirectness of wind and solar power stations, the storage complementarity of wind, solar and storage is realized, the predictability, controllability and dispatchability of new energy power generation are improved, and the safe and stable operation and effective consumption of new energy are solved.



Power**STROM** 5000

Liquid cooled storage container 5.0MWh

- High Energy Efficiency
- Stable and Reliable
- Remote Inspection

Power**STROM** 3700

Liquid cooled storage container 3.7MWh

- Market-tested Reliability
- Quick transportation
- Flexible Configuration

CELL PRODUCTS



- High circulation
- Small size and light weight
- Lamination process

Iron-lithium pouch cells		50Ah
Rated capacity (Ah)		51.5 @1C
Minimum capacity (Ah)		50 @1C
Rated voltage (V)		3.2
Standard current (A)	charge	25
	discharge	50
Maximum current (A)	charge	50
	discharge	75
Size (mm)		12.4*163*233
AC internal resistance (mΩ)		≤0.8
Weight (g)		≤965
Cycle life		6000



High Reliability

- Excellent safety performance in electrical, mechanical, and environmental aspects

Strong Durability

- Long service life with good storage and cycle durability

Strong Environmental Adaptability

- Capable of withstanding high and low temperatures, as well as high altitudes, with a wide operating temperature range and broad geographical coverage

Lithium iron phosphate square shell cell	305Ah	315Ah
Rated capacity (Ah)	305@0.5P	315@0.5P
Rated energy (Wh)	976 @0.5P	1008 @0.5P
Rated voltage (V)	3.2	
Charge-discharge rate (P)	charge	0.5
	discharge	0.5
Size (mm)	71.8×173.9×207.2	
AC internal resistance(mΩ)	≤0.22	
Weight (g)	≤5700	≤5900
Cycle life	13000	13000

RESS PRODUCTS



Flexible configuration

- Inverter has a wide power range
- Modular concept
- Terminal cover design

Quick installation

- Stacked installation
- Blind mate connection
- Parameter presetting

Safe and Efficient

- Intelligent BMS
- Low temperature charge (-10°C) and discharge (-20°C)
- Smart WEB&APP



All-in-one integration

- No gaps between modules
- Inverter side outlet
- Highly integrated software

Quick installation

- Stacked installation
- Blind mate connection
- The inverter does not need to be wall-mounted

Safe and Efficient

- Intelligent BMS
- Low temperature charge (-10°C) and discharge (-20°C)
- Smart WEB&APP

Item		PowerX 1 PLUS		
Hybrid inverter				
Grid port	Maximum grid-tied input/output power	3kW/3.6kW/4kW/4.6kW/5kW/6kW		
	Rated operating voltage	L+N+PE, 230Vac		
	Rated operating frequency	50Hz/60Hz		
Load port	Maximum off-grid output power	3 kVA/3.6kVA/4kVA/4.6kVA/5kVA/6kVA		
	Rated output voltage	L+N+PE, 230Vac		
	Rated output frequency	50Hz/60Hz		
On-grid and off-grid switching time		≤10ms		
PV port	Maximum PV input power	4.5kWp/6kWp/6kWp/8kWp/8kWp/9kWp		
	MPPT voltage range	80Vdc~550Vdc		
	Maximum input current per MPPT	18A/18A, 2 MPPT		
Battery				
Cell type		LiFePO4		
Number of modules		1	2	3
Nominal energy		5.12kWh	10.24kWh	15.36kWh
Nominal capacity		100Ah	200Ah	300Ah
Maximum charge/discharge power		3kW/3.6kW/4kW/4.6kW/5kW/6kW (Limited to inverters)		
DOD		95%		
Temperature		-25~60°C(Charge: -10~50°C; Discharge: -20~50°C)		
Humidity		5~95%RH, No condensation		
Cycle life		> 6000@25°C@0.5C		
System				
Communication		RS485, CAN, WIFI		
Cooling method		Natural cooling		
Altitude		≤2000m		
Protection level		IP65		
Dimensions (W*D*H)		640*200*1160 mm	640*200*1560 mm	640*200*1960 mm
Weight		≈72kg	≈116kg	≈162kg
Safety regulation		IEC62109-1/-2, IEC62477-1, IEC61000-6-1/-2/-3/-4, IEC62619, CE		
Grid regulation		VDE-AR-N4105/G99/CEI0-21 /EN50549/CI 0-11 /NRS097-2-1 I AS 4777.2/R25/UNE217001 /UNE217002/NTS 2.1		

Item		PowerX 3 PLUS		
		Hybrid inverter		
Grid port	Maximum grid-tied input/output power	4kW/5kW/6kW/8kW/10kW		
	Rated operating voltage	3L+N+PE, 400Vac		
	Rated operating frequency	50Hz/60Hz		
Load port	Maximum off-grid output power	4kVA/5kVA/6kVA/8kVA/10kVA		
	Rated output voltage	3L+N+PE, 400Vac		
	Rated output frequency	50Hz/60Hz		
	On-grid and off-grid switching time	≤10ms		
PV port	Maximum PV input power	8kWp/10kWp/12kWp/16kWp/20kWp		
	MPPT voltage range	140Vdc~950Vdc		
	Maximum input current per MPPT	16A/16A/16A, 3 MPPT		
		Battery		
	Cell type	LiFePO4		
	Number of modules	2	3	4
	Nominal energy	9.6kWh	14.4kWh	19.2kWh
	Nominal capacity	50Ah		
	Maximum charge/discharge power	4kW/5kW/6kW/8kW/10kW (Limited to inverters)		
	DOD	95%		
	Temperature	Charge: -10~50°C; Discharge: -20~50°C		
	Humidity	5~95%RH, No condensation		
	Cycle life	> 6000@25°C@0.5C		
		System		
	Communication	RS485, CAN, WIFI		
	Cooling method	Natural cooling		
	Altitude	≤2000m		
	Protection level	IP65		
	Dimensions (W*D*H)	700*206*1488mm	700*206*1893mm	700*206*2298mm
	Weight	≈157kg	≈210kg	≈263kg
	Safety regulation	IEC62109-1/-2, IEC62477-1, IEC61000-6-1/-2/-3/-4, IEC62619, CE		
	Grid regulation	VDE-AR-N 4105: 2018, G98, G99, C10/11 : 2021, NTS 631, RD647: 2020 UNE 217002: 2020, VDE 0126-1-1, NRS 097-2-1, AS/NZS 4777.2: 2020, EN 50549-1		

RESS PRODUCTS



Proven and reliable

- Long life
- Intelligent management
- Wide adaptation

Extreme flexibility

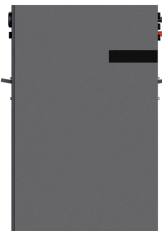
- There are various ways to install
- Wiring type optional
- Expansion is quick and easy

Economic safety

- Low-cost control
- Cell firewall

Item	PowerX E5
Cell type	LiFeP04
Nominal energy	5.12kWh
Nominal capacity	100Ah
Rated voltage	51.2Vdc
Operating voltage range	44.8Vdc~57.6Vdc
Maximum charge/discharge current	100A/100A
DOD	95%
Communication	RS485, CAN, WIFI (Optional)
Expansion	Up to 16 units in parallel
Dimensions (W*D*H)	440*535*130 mm
Weight	≈45kg
Temperature	Charge: -10~50°C; Discharge: -20~50°C
Humidity	5~95%RH, No condensation
Altitude	<2000m
Protection level	IP20
Installation	Indoor, wall-mounted, stacked, built-in rack housing; Fence lock screw power connection or push-in power connection
Cycle life	>6000@25°C@0.5C
Certification	IEC62619/CE/UN38.3/RoHs/UL1973/UL9540A/FCC

RESS PRODUCTS



Thin and elegant

- Thin and lightweight
- Exquisite appearance

Reliable waterproof

- IP65 rated standard
- 15 years design life

Easy to setup

- Push-in connectors are used for the power wiring of the product
- Supports one-key power on/off



Thin and elegant

- Thin and lightweight
- Exquisite appearance

Reliable waterproof

- IP65 rated standard
- 15 years design life

Cost-effective

- High energy density
- Plug and play

Item	PowerX W5
Cell type	LiFePO4
Nominal energy	5.12kWh
Nominal capacity	100Ah
Rated voltage	51.2Vdc
Operating voltage range	43.2Vdc~57.6Vdc
Maximum charge/discharge current	50A/100A
DOD	95%
Communication	RS485, CAN, WIFI (Optional)
Expansion	Up to 8 units in parallel
Dimensions (W*D*H)	420*140*650 mm
Weight	≈45kg
Temperature	Charge: -10~50°C; Discharge: -20~50°C
Humidity	5~95%RH, No condensation
Altitude	<2000m
Protection level	IP65
Installation	Wall-mounted, floor-to-barrery
Cycle life	>6000@25°C@0.5C
Certification	IEC62619/CE/UN38.3/RoHs

Item	PowerX W10
Cell type	LiFePO4
Nominal energy	10.24kWh
Nominal capacity	200Ah
Rated voltage	51.2Vdc
Operating voltage range	43.2Vdc~57.6Vdc
Maximum charge/discharge current	100A/150A
DOD	95%
Communication	RS485, CAN, WIFI (Optional)
Expansion	Up to 8 units in parallel
Dimensions (W*D*H)	630*184*750 mm
Weight	≈85kg
Temperature	Charge: -10~50°C; Discharge: -20~50°C
Humidity	5~95%RH, No condensation
Altitude	<2000m
Protection level	IP65
Installation	Wall-mounted, floor-to-barrery
Cycle life	>6000@25°C@0.5C
Certification	IEC62619/CE/UN38.3/RoHs

RESS PRODUCTS



Quick Stacking

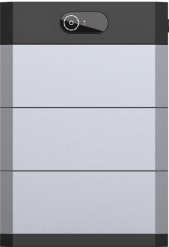
- Stacking installation
- Blind mate connection

Flexible configuration

- Easy series expansion
- Convenient parallel expansion

Highly compatible

- Adaptation to mainstream inverters
- Automatic addressing



- Easy to install
- Support a mix of old and new modules
- Efficient operation

Item	PowerX S5
Cell type	LiFeP04
Nominal energy	5.12kWh
Nominal capacity	50Ah
Rated voltage	102.4Vdc
Operating voltage range	91.2Vdc~115.2Vdc
Maximum charge/discharge current	25A/40A
DOD	95%
Communication	RS485, CAN, WIFI
Expansion	1000V System (Up to 8 battery modules can be connected in series)
Dimensions (W*D*H)	Control box + base: 636*330*265 mm Single cell layer: 636*330*188 mm
Weight	Control box + base: ≈28kg Single module layer: ≈48kg
Operating Temperature	Charge: -10~50°C; Discharge: -20~50°C
Humidity	5~95%RH, No condensation
Altitude	<2000m
Protection level	IP65
Installation	Stacked to the ground
Cycle life	>6000@25°C@0.5C
Certificate	IEC62619/IEC60730/CE/IEC62040/UN38.3/RoHs

Item	PowerX S5 PRO
Nominal energy of the module	5.12kWh
Energy available for the mod	5.05 kWh
Cell configuration	1P16S
System voltage rating	400Vdc
Voltage range of use	250~450Vdc
Rated capacity	100Ah
The maximum Charge/Discharge power of the module	2.5kW/5.0kW
Correspondence	CAN、RS485、WIFI
Maximum battery of the system	40kWh
Humidity	≤85%
Temperature	Charge: -10°C ~ 50°C Discharge: -20°C ~ 50°C
Dimensions (L*W*H)	Module: 640*270*240mm Control box: 640*270*160mm Base: 640*270*50mm
Weight	Module≤45kg
Installation	Stacked floor mounting
IP rating	IP65
Elevation	<2000m
Standard	UN38.3/IEC61000/IEC62619/CE
Cycle life	>6000 (25°C)
Design life	15 years (25°C)

RESS PRODUCTS



Blazing-fast charging

- Efficient charging
- Seamless compatible charging
- UPS mode

High energy and durability

- Automotive-grade self-developed battery cells
- Long battery life of the same volume

Compact and Portable

- Only 10KG
- Ergonomic double handle design

Portable Power Station	PowerX MINI	PowerX MINI PRO
Battery type	Automotive-grade NCM	Automotive-grade NCM
Battery capacity	1002Wh	1002Wh
Output power	1000W	bidirectional 1200W
AC output	110V/220V/230V 50HZ/60HZ	110V/220V/230V 50HZ/60HZ
USB port output	USB-A1 5V/2.4A USB-A2 18W USB-C1 30W USB-C2 双向PD100W	USB-A1 5V/2.4A USB-A2 18W USB-C1 30W USB-C2 PD100W
DC output	Cigarette lighter 、 5521 12V/10A	Cigarette lighter 、 5521 12V/10A
Charging parameters	DC/MPPT 200W Fast charging 500W PD 100W On-board input 120W	AC input 720W DC/MPPT 200W On-board input 120W
Dimensions (W*H*D)	348 x 242 x 236mm	348 x 242 x 236mm
Weight	about 10Kg	about 10Kg
Temperature	charge: 0°C ~ 40°C discharge: -10°C ~ 45°C	charge: 0°C ~ 40°C discharge: -10°C ~ 45°C
Ingress protection	Rainproof	Rainproof
Certification	PSE/UN38.3/CE/UL/ROHS/CCC/FCC	PSE/UN38.3/CE/UL/ROHS/CCC/FCC
Cycle life	> 800 (25°C) , 80% EOL	> 800 (25°C) , 80% EOL
Warranty	24 months	24 months

C&I ESS PRODUCTS



Ultimate Safety

- Battery Cell Firewall
- Full-Scale Firefighting
- Cloud-Edge-Device Collaboration

Profits Evergreen

- Premium Battery Cells
- Variable Frequency Liquid Cooling System
- Turnkey delivery

Effortless Website

Construction

- Five-Star Service
- Remote Inspection
- Eco-Friendly

Item	PowerPLANT 230 PLUS
	Inverter
Rated AC power	100kW
Rated AC current	144A
Rated AC voltage	3W+PE, 400Vac
THDI	<5% (Rated power)
THDU	<3% (Linear loads)
	Battery
Cell type	LiFeP04
Nominal energy	232.96kWh
Nominal capacity	280Ah
Rated voltage	832Vdc
Operating voltage range	650Vdc~959Vdc
Maximum charge-discharge rate	0.5P@25°C
Cycle life	>8000@25°C@0.5C
	System
Communication	RS485, CAN, Ethernet
Cooling method	Liquid cooling
Firefighting	Pack+cabinet-level detection inhibition: Suppression medium: aerosol (standard)/perfluorohexanone (optional)
Operation Altitude	<4000m (More than 2000m derating)
Protection level	IP54
Dimensions (W*D*H)	1375*1350.5*2050 mm
Weight	≈2.5T
Safety Pregulation, EMC	IEC62619/CE/UL1973/UL9540A/UN38.3/RoHS/IEC 61000-6-2: 2019/EN IEC 61000-6-4: 2019/EN 62109-2: 2011/EN 62109-1: 2010/IEC 62109-2: 2011/IEC 62109-1: 201

C&I ESS PRODUCTS



High volume and long-lasting

- Preferred cells
- Inverter liquid cooling
- Refined management

Adaptable

- Highly integrated
- FCL delivery
- High compatibility

Extreme protection

- Physical isolation + electrical protection
- Integration of fire protection and explosion venting
- Waterproof and anti-corrosion

Item	PowerPLANT 370	PowerPLANT 410
Cell type	LiFeP04	LiFeP04
Nominal energy	372. 73kWh	417. 99kWh
Nominal capacity	280Ah	314Ah
Rated voltage	1331. 2Vdc	1331. 2Vdc
Operating voltage range	1164. 8Vdc~1497. 6Vdc	1164. 8Vdc~1497. 6Vdc
Maximum charge/discharge current	0. 5P@25°C	0. 5P@25°C
Communication	RS485, CAN, 4G	RS485, CAN, 4G
Dimensions (W*D*H)	1300*1300*2350mm	1300*1300*2350mm
Weight	≈3. 5T	≈3. 5T
Temperature	-30~55°C	-30~55°C
Humidity	0~95%RH	0~95%RH
Altitude	<4000m	<4000m
Level protection	IP55	IP55
Fire fighting methods	Cabinet level, Pack level, aerosol/perfluorohexanone optional Water fire fighting and explosion venting plates are standard	
Cooling method	Liquid cooling, cabinet-level cell temperature difference<3°C	
Cycle life	>8000@25°C@0. 5C	>12000@25°C@0. 5C
Certification	IEC62619/CE/UL1973/UL9540A/UN38. 3/RoHS	IEC62619/CE/UL1973/UL9540A/UN38. 3/RoHS

C&I ESS PRODUCTS



Full output

- Exclusive heat dissipation air duct design
- 1C rate continuous discharge

Economical and stable

- Simple 3U module design
- 15 years design life

Installation is easy to operate and maintain

- Plug and play
- Quick and easy

Item	PowerBrick-R1
Cell type	LiFeP04
Nominal energy	63.8kWh (total 12 Pack)
Nominal capacity	104Ah
Rated voltage	614.4Vdc
Operating voltage range	547.2Vdc~691.2Vdc
Maximum charge/discharge current	50A/100A
DOD	95%
Communication	RS485, CAN, WIFI
Expansion	Up to 8 clusters in parallel
Dimensions (W*D*H)	580*650*2200 mm
Weight	≈726kg
Temperature	Charge: -10~50℃; Discharge: -20~50℃
Humidity	5~95%RH, No condensation
Altitude	<2000m
Protection level	IP20
Installation	Indoor, rack mounted
Cycle life	>6000@25℃@0.5C
Certification	IEC62619/CE/UN38.3/RoHs

UTILITY ESS PRODUCTS



Market-tested Reliability

- First-Tier Brand 280Ah Battery Cells
- Standard Containerized BESS Design
- Intelligent Liquid Cooling Temperature Control

Quick transportation

- Standard 20-Foot Container Design
- Factory Pre-Assembled

Flexible Configuration

- Fine-tailored battery sizing
- Flexible Deployment



High Energy Efficiency

- Premium High-Energy 314Ah Battery Cells
- High Energy Throughput Rate
- Single-Sided Door Opening

Stable and Reliable

- High Environmental Adaptability
- Multi-Level Fire Protection Architecture
- Systematic Interlocking Protection

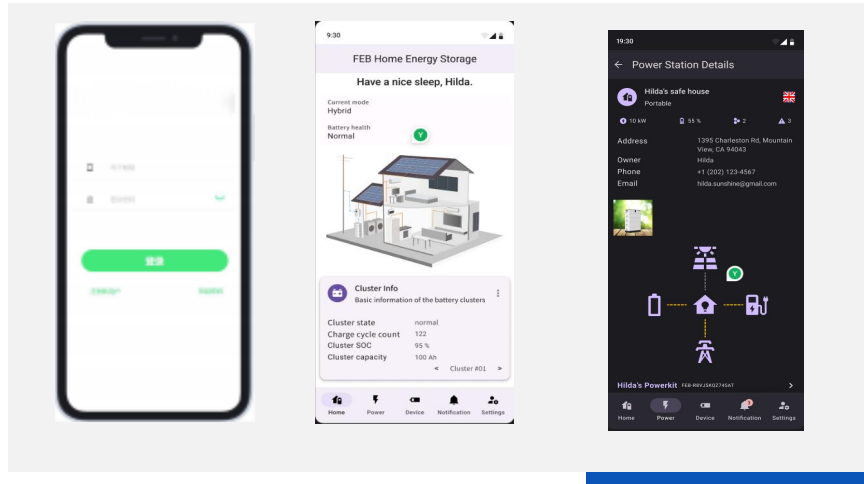
Remote Inspection

- Real-Time Monitoring and Intelligent Operation and Maintenance

Item	PowerSTROM 3700
Cell type	LiFePO4
Rated energy	3.727MWh
Dimension (W*D*H)	6058*2438*2896mm
Rated voltage	1331.2Vdc
Work voltage range	1164.8Vdc~1497.6Vdc
Numberofbatteryclusters	10 clusters, 1P416S
Maximumcharge/discharge rate	0.5P@25°C
Communication	RS485, Ethernet
Weight	≈36T
Temperature	-30~55°C
Humidity	0~95%RH
Elevation	<4000m
IP level	IP55
Fire fighting methods	PACK level firefighting, heptafluoropropane/perfluorohexanone optional, water firefighting standard
Cooling method	Liquid-cooled, the temperature difference ≤ 3° C
Cycle life	>8000@25° C&0.5P
Authentication	UL1973/UL9540A//UL9540/IEC62619/IEC63056/IEC62933

Item	PowerSTROM 5000
Cell type	LiFePO4
Rated energy	5.015MWh
Dimension (W*D*H)	6058*2438*2896mm
Rated voltage	1331.2Vdc
Work voltage range	1164.8Vdc~1497.6Vdc
Numberofbatteryclusters	12 clusters, 1P416S
Maximumcharge/discharge rate	0.5P@25°C
Communication	RS485, Ethernet
Weight	≈42T
Temperature	-30~55°C
Humidity	0~95%RH
Elevation	<4000m
IP level	IP55
Fire fighting methods	PACK level firefighting, heptafluoropropane/perfluorohexanone optional, water firefighting standard
Cooling method	Liquid-cooled, the temperature difference ≤ 3° C
Cycle life	>12000@25°C&0.5P
Authentication	UL1973/UL9540A//UL9540/IEC62619/IEC63056/IEC62933

CLOUD



- Platform-based digital interconnection management, providing SaaS and PaaS services
- Cloud-edge collaboration, auxiliary control, and unified scheduling management
- Energy storage system life cycle management, data storage, data mining
- Safety and fault monitoring and early warning, active protection
- Rapid fault diagnosis, visualized remote O&M, and intelligent order dispatch and inspection
- Big data analysis to expand AI applications
- Suitable for RESS, C&IESS and other application scenarios

