

VESTWOODS



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VESTWOODS PRODUCT BROCHURE

RESIDENTIAL ENERGY STORAGE SOLUTION



C&I ESS SOLUTION



TELECOM PRODUCT & SOLUTION



UPS BACKUP BATTERY SOLUTION



RESIDENTIAL ENERGY STORAGE SOLUTION

A smart residential energy solution centered around integrated solar and home storage systems, combining AI-powered energy management and cloud monitoring to optimize household energy costs and efficiency throughout the entire lifecycle - enabling a smarter, safer, and greener home microgrid.

RESCUBE SERIES

Install-free Home Power Backup

1 kW | 2 kWh | Off-grid



ES-Grade LFP Battery
Utilize 314Ah LFP battery
guaranteeing energy
station grade safety and
duration



Fast Solar Charging
Up to 600W / 100V PV
input allowing 2-3PV
panels in series



Pure Sine Wave Output
Maximize energy transfer
and minimize
equipment failure



IP65 Level Cooling Design
Cooling by heat dissipa-
tion fin not by active out
air preventing dust and
insects going inside



Parallel Expansion
Support 2 units adding
up to 2kW/4kWh



Model	VEP1K-20B
PV Input	
Max. PV Input Power	600W
PV Input Voltage Range& Start Voltage	10~100V
Maximum Charge Current	16A
MPPT Efficiency	>99%
PV Input Port	1*MC4
AC Input	
Max. AC Input Power	1150W±5%
Input Voltage Range & Frequency	155-300Vac, 45-65Hz
Max. Input Current	7.5A±10%
AC Input Port	1*Socket (optional)
AC Output	
Rated Output Power	1000W±5%
Peak Output Power	1500W±5%(15s)
Output Voltage Range	2*220~240V
AC Output Port	2*Sockets
Switch Time	Switching Time<20ms
Battery Parameters	
Cell Type	LFP
Nominal Battery Voltage	6.4V
Nominal Battery Energy	2009.6Wh
General Specification	
Cooling Mode	Fins Dissipation
Altitude	<3000m
Noise	<25dB
Weight	19±0.5kg
Dimension(W*H*D)	304*200*310mm
IP Rating	IP20
Operating Temperature Range	Charging:0°C~45°C;Discharging:-20°C~45°C
Allowed Humidity Range	20%~85%

RESCUBE SERIES

Install-free Mini Home Power Backup
500 W | 1 kWh | Off-grid



ES-Grade LFP Battery
Utilize 314Ah LFP battery
guaranteeing energy
station grade safety and
duration



Fast Solar Charging
Up to 300W PV input



Pure Sine Wave Output
Maximize energy transfer
and minimize equipment
failure



Model	VEP05K-10B
PV Input	
Max. PV Input Power	300W
PV Input Voltage Range& Start Voltage	11-55V
Maximum Charge Current	10A
MPPT Efficiency	>99%
PV Input Port	XT60 with MC-4 adaptor
AC Input	
Max. AC Input Power	500W±5%
Input Voltage Range & Frequency	90-280V±5V, 45-65Hz
Max. Input Current	3.65A±10%
AC Input Port	1*Socket (optional)
AC Output	
Rated Output Power	500W±5%
Peak Output Power	1000W±5%(15s)
Output Voltage Range	210-230V
AC Output Port	1*Socket and 2*USB
Switch Time	Switching Time<20ms
Battery Parameters	
Cell Type	LFP
Nominal Battery Voltage	3.2V
Nominal Battery Energy	1004.8 Wh
General Specification	
Cooling Mode	Air Cooling
Altitude	<3000m
Noise	<55dB
Weight	11±0.5kg
Dimension(W*H*D)	300*200*150mm
IP Rating	IP20
Operating Temperature Range	Charging:0°C~45°C;Discharging:-20°C~45°C
Allowed Humidity Range	20~90%

P SERIES

LV Wall-mounted Battery 5 kWh



Ultimate Safety
1M self-innovate protection board shipped worldwide



Most Economical Choice
Optimized design for best cost-performance



High Compatibility
Major inverter matched
Convenient LCD display to choose different inverters



Self-developed BMS
Precise cell balancing, protection & real-time monitoring

Model	VT48100E-W
Cell Type	LFP
Nominal Energy	5.12kWh
Nominal Capacity	100Ah
Nominal Voltage	51.2V
Operating Voltage Range	42.0-57.6V
Nominal Charge Voltage	57.6V
Charge Current/Max.Continuous	100A
Discharge Cut-off Voltage	42.0V
Discharge Current/Max. Continuous	100A
Recommended Depth of Discharge	80% DOD
Operating Temp. Range/Charge	0°C~60°C
Operating Temp. Range/Discharge	-20°C~60°C
Dimension(W*H*D)	443*450*150mm
Weight	Approx. 43kg
IP Rating	IP20
Expansion	Max. 15 Units in Parallel
Communication	CAN/RS485
Cooling Mode	Natural Cooling
Cycle Life	6000 Cycles,80%DOD@25°C
Design Life	15+Years(25°C)
Installation	Floor/ Cabinet/ Rack Mounted
Allowed Humidity Range	≤95% RH
Protections	Over Charge/Over Discharge/Over Temperature Over Current/Short Circuit etc.
Compatible Inverters	Deye/Solis/Hoymiles/Senergy/Afore/Megarevo/SRNE/Inhenergy etc.
Certifications	UN38.3, CE-EMC, IEC 62619



L SERIES

LV Battery

5 | 10 | 16 kWh



Triple-layer Safety
Battery cell × electrical
× structural protection
interacted



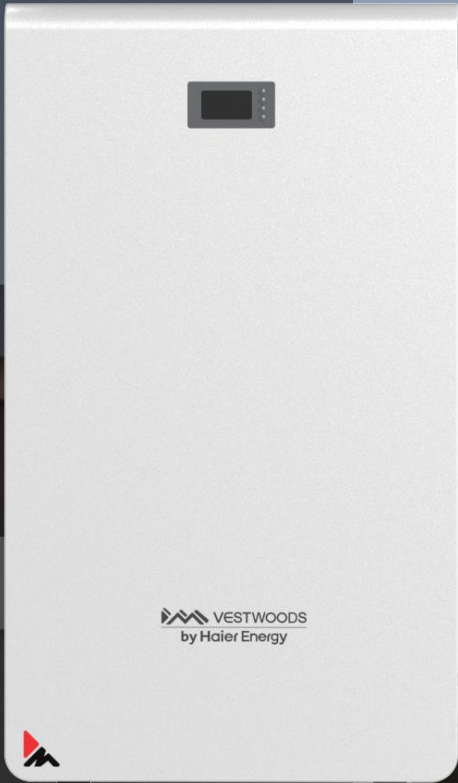
Self-developed BMS
Precise cell balancing,
protection & real-time
monitoring



High Compatibility
Major inverter matched
Convenient LCD display
to choose different
inverters



High-temp Resistance
Deliver stable power
up to 55°C



Model	VE51100L	VE51200L	VE51314L
Cell Type	LFP		
Nominal Energy	5.12kWh	10.24kWh	16.07kWh
Nominal Capacity	100Ah	200Ah	314Ah
Nominal Voltage	51.2V		
Operating Voltage Range	42.0-57.6V		
Nominal Charge Voltage	57.6V		
Charge Current/Max. Continuous	100A	200A	157A
Discharge Cut-off Voltage	42.0V		
Discharge Current/Max. Continuous	100A	200A	157A
Recommended Depth of Discharge	80%		
Ambient Temperature/Charge	0-60°C		
Ambient Temperature/Discharge	-20-60°C		
Dimension(W*H*D)	420*700*150mm	580*802*150mm	500*880*240mm
Weight	Approx. 45.0kg	Approx. 82.0kg	Approx. 114kg
IP Rating	IP20		
Expansion	Max. 15 Units in Parallel		
Color	White		
Communication	CAN/RS485		
Cooling Mode	Natural Cooling		
Cycle Life	6000 Cycles, 80%DOD@25°C		
Design Life	15+ Years (25°C)		
Installation Method	Floor Mounted		
Allowed Humidity Range	≤95% RH		
Altitude	<2000m		
Protections	Over Charge/Over Discharge/Over Temperature Over Current/Short Circuit etc.		
Compatible Inverters	Deye/Solis/Hoymiles/Senergy/Afore/Megarevo/SRNE/Inhenergy etc.		
Certifications	UN38.3, IEC62619, CE-EMC, Rohs		

W SERIES

LV Battery

5 | 10 | 16 kWh



Convenient Commissioning
Wifi / Bluetooth / APP supported



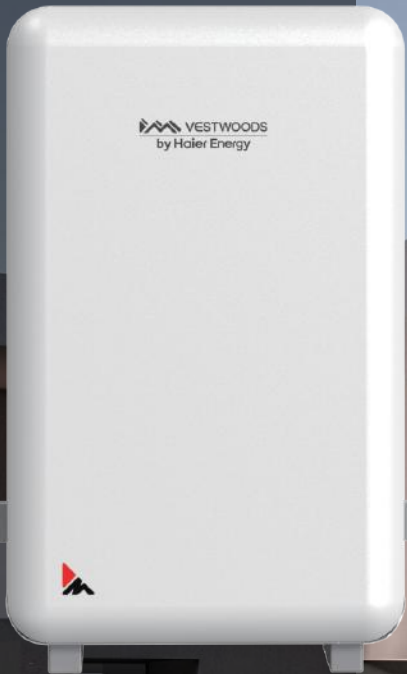
Self-developed BMS
Precise cell balancing, protection & real-time monitoring



High Compatibility
Major inverter matched



Wide Temp Range
Stand from -20°C to 55°C



Model	VE51100W	VE51200W	VE51314W
Cell Type	LFP		
Nominal Energy	5.12kWh	10.24kWh	16kWh
Nominal Capacity	100Ah	200Ah	314Ah
Nominal Voltage	51.2V		
Operating Voltage Range	42.0-57.6V		
Nominal Charge Voltage	57.6V		
Charge Current/Max. Continuous	100A	150A	150A
Discharge Cut-off Voltage	42.0V		
Discharge Current/Max. Continuous	100A	150A	150A
Recommended Depth of Discharge	80%		
Ambient Temperature/Charge	0~60°C		
Ambient Temperature/Discharge	-20~60°C		
Dimension(W*H*D)	410*665*206mm	530*762*260.5mm	607.4*842*261.5mm
Weight	Approx. 51.8kg	Approx. 91.0kg	Approx.127kg
IP Rating	IP65		
Expansion	Max. 15 Units in Parallel		
Color	White		
Communication	CAN/RS485		
Monitoring	APP		
Cooling Mode	Natural Cooling		
Cycle Life	6000 Cycles, 80%DOD@25°C		
Design Life	15+ Years (25°C)		
Installation Method	Floor/Wall Mounted		
Allowed Humidity Range	≤95% RH		
Altitude	<2000m		
Protections	Over Charge/Over Discharge/Over Temperature/Over Current/Short Circuit etc.		
Compatible Inverters	Deye/Solis/Hoymiles/Senergy/Afore/Megarevo/SRNE/Inhenergy etc.		
Certifications	UN38.3, IEC62619, CE-EMC, IEC RED, Rohs, IEC 62040		

LV SERIES

Single Phase Inverter

3 - 12 kW



Up to 200% PV Oversizing
Large PV input maximizing yield & high performance



Flexible PV Selection
Up to 18A per MPPT
100V startup voltage



UPS Level Transition
Switching Time < 4ms



Overload Ability
200% for 10s



Model	VEH-S3KA3-LV	VEH-S3.6KA3-LV	VEH-S4.6KA3-LV	VEH-S5KA3-LV	VEH-S6KA3-LV
Battery					
Battery type	Li-ion/Lead-acid				
Battery voltage range	40-60V				
Max. charge/discharge current	75/75A	90/90A	115/115A	120/120A	135/135A
Max. charge/discharge power	3000/3150W	3600/3800W	4600/4850W	5000/5250W	6000/6300W
Charging strategy for Li-ion battery	Self-adaption to BMS				
Charging curve	3 Stages/Equalization				
External temperature sensor	Optional				
Communication	CAN				
PV Input					
Recommended max. PV power	6000W	7200W	9200W	10000W	12000W
Max. input voltage	550V				
Rated voltage	360V				
Start-up voltage	100V				
MPPT voltage range	90-500V				
Max. input current	18/18A				
Max. short circuit current	27/27A				
MPPT number/Max. input strings number	2/2				
AC Input and Output (On-grid)					
Rated output power	3000W	3680W	4600W	5000W	6000W
Max. output apparent power	3300VA	3680VA	4600VA	5500VA	6600VA
Max. continuous AC bypass current	50A				
Grid form	L/N/PE				
Rated AC output voltage/Range	220/154-264, 230/161-276, 240/168-288				
Rated grid frequency	50/60Hz				
Max. output current	15A	15A	20.9	25A	30A
Power factor	>0.99 (0.8 leading-0.8 lagging)				
AC Output (Off-grid)					
Rated output power	3000W	3680W	4600W	5000W	6000W
Max. output apparent power	6000VA, 10s	7360VA, 10s	9200VA, 10s	10000VA, 10s	12000VA, 10s
Back-up switch time	0ms				
Grid form	L/N/PE				
Rated output voltage	220/230/240V				
Rated output frequency	50/60Hz				
Max. continuous output current	13.6A	16.7A	20.9A	22.7A	27.3A
THDv (@linear load)	<3%				
Efficiency					
MPPT efficiency	99.9%				
Max. efficiency	97.7%				
EU efficiency	97.0%				
Protection					
Anti-islanding protection	Integrated				
PV string input reverse polarity protection	Integrated				
Insulation resistor detection	Integrated				
Residual current monitoring unit	Integrated				
AC over current protection	Integrated				
AC short current protection	Integrated				
AC overvoltage and undervoltage protection	Integrated				
Surge protection	DC Type II/AC Type III				
General					
Dimensions (W*H*D)	506*495*99mm				
Weight	17kg				
Mounting	Wall mounting				
Operating temperature	-25°C to +65°C (>45°C, derating)				
Relative humidity	0-95%, no condensing				
Cooling	Natural convection				
Topology (Solar/Battery)	Transformerless/High-frequency isolation				
Altitude	≤4000m				
Protection degree	IP66				
Noise	<35dB				
User interface	LED, App				
Digital input/output	DRM, 1×DI, 2×DO				
Communication	RS485, Wi-Fi/Ethernet (optional)				
Certifications and Standards					
Grid connection standard	G98, G99, G100, EN 50549-1/-10, NF EN 50549-1/-10, CEI 0-21, PEA, MEA, IEC 62116, IEC 61727, IEC 60068, IEC 61683, DEWA, IEC 62109-1/-2, EN 61000-6-1/-3				
Safety/EMC standard	IEC 62109-1/-2, EN 61000-6-1/-2/-3/-4				

LV SERIES

Three Phase Inverter

5 - 20 kW



Up to 200% PV Oversizing
Large PV input maximizing yield & high performance



Flexible PV Selection
Up to 20A per MPPT
4MPPTs



100% Unbalanced Output
Max output of each phase up to 50% rated power



Overload Ability
200% for 10s



Model	VEH-T15KA3-LV	VEH-T20KA3-LV
Battery		
Battery Voltage Range	40-60V	
Max. Charge/Discharge Current	300/300A	350/350A
Charging Strategy For Liion Battery	Self-adaption to BMS	
Charging Curve	3 Stages/Equalization	
PV Input		
Recommended Max. PV Power	30000W	40000W
Max. Input Voltage	1000V	
Rated Voltage	720V	
Start-UP Voltage	150V	
MPPT Voltage Range	150-900V	
Max. Input Current	20A/20A/20A/20A	
Max. Short Circuit Current	30A/30A/30A/30A	
MPPT Number/Max. Input Strings Number	4/4	
AC Input and Output (On-grid)		
Rated Output Power	15000W	20000W
Max. Output Apparent Power	16500VA	22000VA
Grid Form	3L/N/PE	
Rated AC Output Voltage/Range	380V/400V, 266V-480V	
Rated Grid Frequency	50/60Hz	
Max. Output Current	25A	33.3A
Power Factor	>0.99 (0.8 leading ... 0.8 lagging)	
THDi (@Rated Output)	<3%	
AC Output ((Back-up)		
Rated Output Power	15000W	20000W
Max. Output Apparent Power	30000VA, 10s	40000VA, 10s
Back-up Switch Time	<10ms	
Grid Form	3L/N/PE	
Rated Output Voltage	380V/400V	
Rated Output Frequency	50/60Hz	
Max. Continuous Output Current	22.8A	30.4A
Max. Continuous AC Bypass Current	50A	
THDv (@linear load)	<3%	
Efficiency		
MPPT Efficiency	99.9%	
Max. Efficiency	98.5%	
EU Efficiency	98.0%	
Max. Battery Discharge to AC Efficiency	95.7%	
General		
Protection	Anti-islanding protection, PV string input reverse polarity protection, Insulation resistor detection, Residual current monitoring unit, AC over current protection, AC short current protection, AC overvoltage and undervoltage protection Surge protection (DC Type II/AC Type III)	
Dimension(W*H*D)	539*696*232mm	
Weight	41kg	
Mounting	Wall mounting	
Operating Temperature	-25°C to +65°C (>45°C, derating)	
Relative Humidity	0-95%, no condensing	
Cooling	Smart fan	
Topology (Solar/Battery)	Transformerless/High-frequency isolation	
Altitude	≤4000m (>2000m, derating)	
Protection Degree	IP66	
Noise	< 55dB	
User Interface	LED, App	
Digital Input/Output	DRM, 2 × DI, 2 × DO	
Communication	RS485, Wi-Fi/WL/4G (optional)	
Certifications and Standards		
Grid Connection Standard	IEC 61727, IEC 62116, EN 50549, VDE-AR-N 4105	
Software Approval	IEC 62109-1/-2, EN 61000-6-1/-2/-3/-4	

*This series is recommended to be compatible with VE-L & VE-W series of batteries.

LV SERIES

Split Phase Inverter

3.8 - 11.5 kW



130% PV Oversizing
2/4 MPPTs
150V start-up voltage



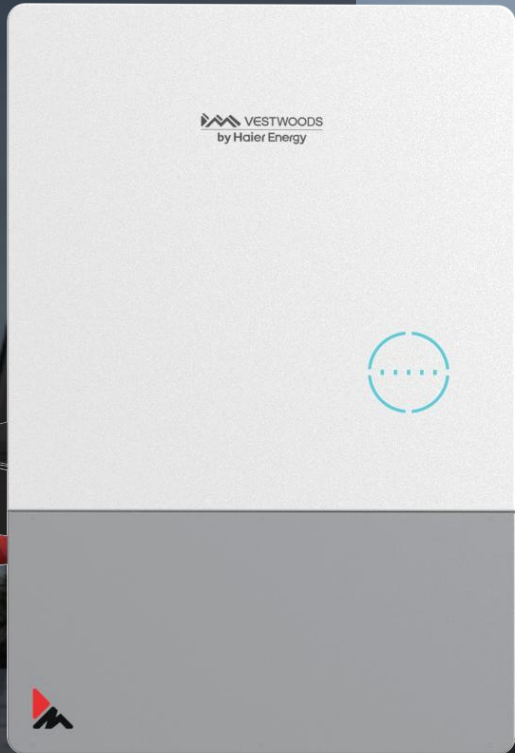
Top-quality IGBT Components
UL Standard components ensure long-term safe and stable operation



UPS Level Transition
Switching Time 0ms



Overload Ability
200% for 10s



Model	VEH-P11.5KA1-LV
Battery	
Battery Voltage Range	40-60V
Max. Charge/Discharge Current	200/200A
Max. Charge/Discharge Power	9600/9600W
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Charging Curve	3 Stages/Equalization
PV Input	
Recommended Max. PV Power	14400W
Max. Input Voltage	550V
Rated Voltage	380V
Start-up Voltage	150V
MPPT Voltage Range	125-500V
Max. Input Current	32/32A
Max. Short Circuit Current	40/40A
MPPT Number/Max. Input Strings Number	2/4
AC Input and Output (On-grid)	
Rated Output Power	11520W
Max. Output Apparent Power	11520VA
Max. Input Power	19200W
Rated AC Output Voltage/Range	240V, 211-264/208V, 183-229V
Rated Grid Frequency	60Hz
Max. Output Current	48A
Max. Input Current	80A
Power Factor	>0.99 (0.8 leading ... 0.8 lagging)
THDi (@rated Output)	<3%
AC Output (Off-grid)	
Rated Output Power	9600W
Max. Output Apparent Power	19200VA, 10s
Back-up Switch Time	<40
Rated Output Voltage	120/240V (split phase), 120/208V
Rated Output Frequency	60Hz
Max. Continuous Output Current	40A
THDv (@linear load)	<3%
Efficiency	
MPPT Efficiency	99.9%
Max. Efficiency	97.6%
EU Efficiency	97.0%
Max. Battery Discharge to AC Efficiency	95.0%
General	
Protection	Anti-islanding protection, PV string input reverse polarity protection, Insulation resistor detection, Residual current monitoring unit, AC over current protection, AC short current protection, AC overvoltage and undervoltage protection, Surge protection (DC Type II/AC Type III)
Dimensions (W*H*D [mm])	19.8*29.1*7.95 inch (502*740*202mm)
Weight	90.4 lbs (41kg)
Mounting	Wall mounting
Operating Temperature	-13°F to +149°F (>113°F, derating)/-25°C to +65°C (>45°C, derating)
Relative Humidity	0-95%, no condensing
Cooling	Natural convection
Topology (Solar/Battery)	Transformerless/High-frequency isolation
Altitude	≤6562 ft (2000 m)
Protection Degree	Type 4X
Noise	<40dB
User Interface	LED, App
Digital Input/Output	1 × DI, 2 × DO
Max. Parallel	10
Warranty	RS485, optional: Wi-Fi/Ethernet/4G
Communication	10 Years
Certifications and Standards	
Grid Connection Standard	IEEE 1547-2018, IEEE 1547.1-2020, SRD2.0
Safety/EMC Standard	UL 1741, CSA C22.2 No.107.1, UL 1741 CRD, UL 1741 SB, FCC Part 15 Class B
AFCI	UL 1699B
Software Approval	UL 1998

*This series is recommended to be compatible with VE-L & VE-W series of batteries.

LV SERIES

Single Phase Inverter

4 kW | 6 kW | 8 kW | Off-grid

IP66

IP66 High Protection
Better protection rating keeps humidity, dust and insects out of device providing longer duration

Up to 200% PV Oversizing

Large PV input maximizing yield & high performance

Wide Grid Range

Wide grid voltage adaptation range of 90-280V

High Expansion for Three Phase

Support up to 6 single-phase inverters or 9 three-phase inverters in a grid configuration

Flexible PV Selection

Up to 18A per MPPT
70V startup voltage



Model	VEH-S6KB4-LV		VEH-S8KB4-LV	
Battery Data				
Battery Type	Lithium-ion & Lead-acid			
Rated Battery Voltage	48V			
Battery Voltage Range	40-60V			
Max. Charge/Discharge Current	125 / 125A		165 / 165A	
Forced Wake-up by PV	YES			
PV Input				
Max. MPPT Input Power	12000W			
Max. Input Voltage	500V			
Rated Input Voltage	370V			
MPPT Voltage Range	60-450V			
No. Of MPPT/ Strings Per MPPT	2 / 1+1			
Max Input Current Per MPPT	18+18A			
Max. Short Circuit Current Per MPPT	27+27A			
Grid Input				
Rated Grid Voltage	220/230/240V±5%			
Voltage Input Range	90-280V			
Rated Grid Frequency	50 / 60Hz			
Max Input Current	40A		50A	
Total Harmonic Distortion	<3% (of nominal power)			
Backup Data				
Rated Output Power	6000W		8000W	
Rated Output Current	27A		35A	
Rated Output Frequency	50/60Hz±0.1%			
Overload Capability	1min@101-110%;10s@110%-150%;5s@150%-200%;100ms@>200%			
Switch Time	10ms for Computer Equipment,20ms for Household Equipment			
Total Harmonic Distortion	<3%			
Efficiency				
Max. Efficiency	97.0%			
MPPT Tracking Efficiency	99.9%			
Protection				
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Power Network Monitoring, Earth Fault Detection,Surge protection level			
Surge Protection	TYPE II(DC), TYPE II(AC)			
Over Voltage Category	OVC II (DC), OVC III (AC)			
General Data				
Operating Temperature	-40~+60(Above 45°C Derating)			
Dimensions (W*H*D)	430*350*177.8mm			
Weight	16.0kg			
Inverter Topology	Non-Isolated			
Cooling	Smart cooling			
Altitude	≤3000m			
Protection Level	IP66			
Communication	RS485 / CAN / Dry contact/ External battery NTC/Parallel communication/WIFI(Built-in)			
Warranty	5 Years			
Standard				
Safety Standards	IEC 62109-1:2010, EN 62109-1:2010, IEC 62109-2:2011, EN 62109-2:2011			
EMC Standards	EN IEC 61000-6-1:2019;EN IEC 61000-6-3:2021;EN IEC 61000-3-11:2019;EN61000-3-12:2011			
Efficiency Standard	IEC 61683:1999			

LV SERIES

Residential Villa ESS

22 kW | 48 kWh



Energy Independence
Stable power to keep essentials running



Significant Cost Savings
Peak shaving to optimize energy consumption



Optimal Choice
Compared to high voltage system, achieves better stability and lower initial cost



Intelligent Energy Management
Real-time monitoring to control energy usage



Model	VEC20K-48kWh
AC Parameters	
Max. DC Input Power	20kW
MPPT Range	150-950V
Rated DC Input Voltage	720V
No. of MPP Trackers	4
Rated Output Power	22kW
Max. Output Apparent Power	22kVA
Max. Charge/Discharge Current	350/350A
Output Frequency and Voltage	50/60Hz, 380V/400V, 266V-480V, 3L/N/PE
Max. Efficiency	98.5%
Dimensions (W*H*D)	539*696*232mm
System Parameters	
Battery Type	LFP
Nominal Battery Voltage	51.2V
Nominal Battery Energy	48kWh
Operating Voltage Range	42.0~57.6V
Charging Temp. Range	0°C~55°C
Discharging Temp. Range	-20°C~55°C
IP Rating	IP20
Expansion	Max. 10 Units in parallel
Communication	CAN
Design Standard	UN38.3, CE-EMC, Rohs
Battery Module Weight	Approx. 114*3kg
Battery Module	
Battery Type	LFP
Cell Capacity	314Ah
Communication	CAN
Module Capacity	16.07kWh
Rated Charge/Discharge Current	160A
Rated Voltage	48V
Dimension(W*H*D)	500*880*240mm
Weight	Approx. 114kg

VESTWOODS LIFE YOUR AI-ASSISTANT

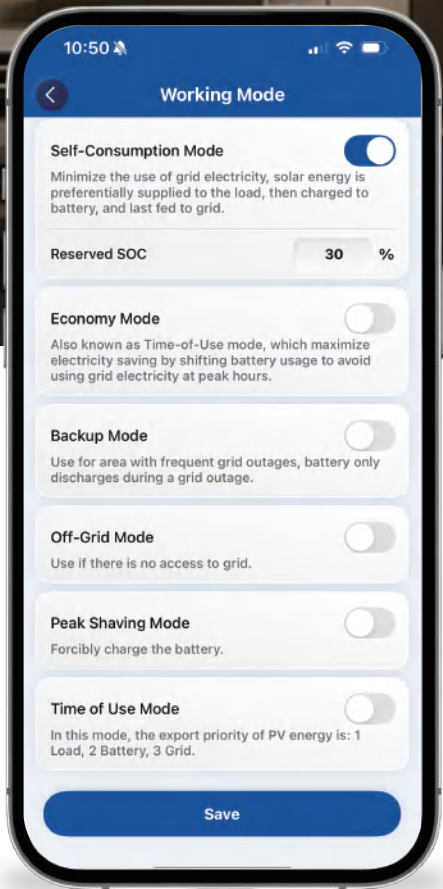
Get in Control of Your Energy Future.



Designed for
Modern Households



System Health
& Security



Anytime,
Anywhere Control



Real-Time
Energy Tracking

C&I ESS SOLUTION

A modular, full-scenario smart energy system that integrates PV, battery storage, and intelligent EMS to deliver end-to-end customized solutions for mining sites, universities, hotels, factories, and other C&I scenarios—promoting sustainable growth and long-term energy strategic upgrades.



APPLICATION SCENARIOS



Energy independence for Off-grid Mines

Green Mines Smart Microgrid Solution

-  Grid-forming technology for Continuous Power Supply
-  Fuel Substitution for Significant Cost Reduction
-  Stable Frequency & Voltage for Equipment Protection



No Outages No Losses

Green Factory Smart Energy Solution

-  Stable Power Quality for Extended Equipment Life
-  Energy Optimization with Precise Cost Control
-  Zero Downtime Zero Losses



Smart Energy Smart Minds

Green Campus Smart Energy Solution

-  Secure Backup for Reliable Campus Protection
-  PV Savings Long-term Value Creation
-  Green Demonstration for Educational Impact



Store More, Profit More

Green Mall Smart Energy Solution

-  Peak Shaving for Reduced Demand Charges
-  Reliable Backup for Business Continuity
-  Energy Cost Visibility for Smart Asset Management



Zero Downtime Zero Complaints

Green Hotel Smart Energy Solution

-  Uninterrupted Service for Superior Guest Experience
-  Fast Payback with Stable Long-Term Returns
-  Millisecond-Level Switching for Full Protection



Clean Energy for Sustainable Agriculture

Green Farm Smart Energy Solution

-  Off-Grid & Weak-Grid Adaptability for Remote Areas
-  Diesel Substitute for Lower Operating Costs
-  Stable Power Supply for Continuous Agricultural Production

Indoor C&I ESS Solution

Rack-Mounted Battery(HV)



Features and Advantages

Safer

- High-quality LFP batteries.
- Over-discharge, overcharge, overcurrent, and extreme temperature protection.
- Supports AC coupling, DC coupling, and microgrid scenarios.

Reliable

- Operating temp: -20~55°C.
- Operate up to 3000m altitude.
- Support up to 10 Cluster in parallel.
- Support up to 160A current output.

Easy Installation

- Time-saving design
- Quick-Connect
- Support 4-13 packs.

Intelligent

- LED display screen.
- Intelligent charge/discharge strategy.
- Support remote operation and maintenance.

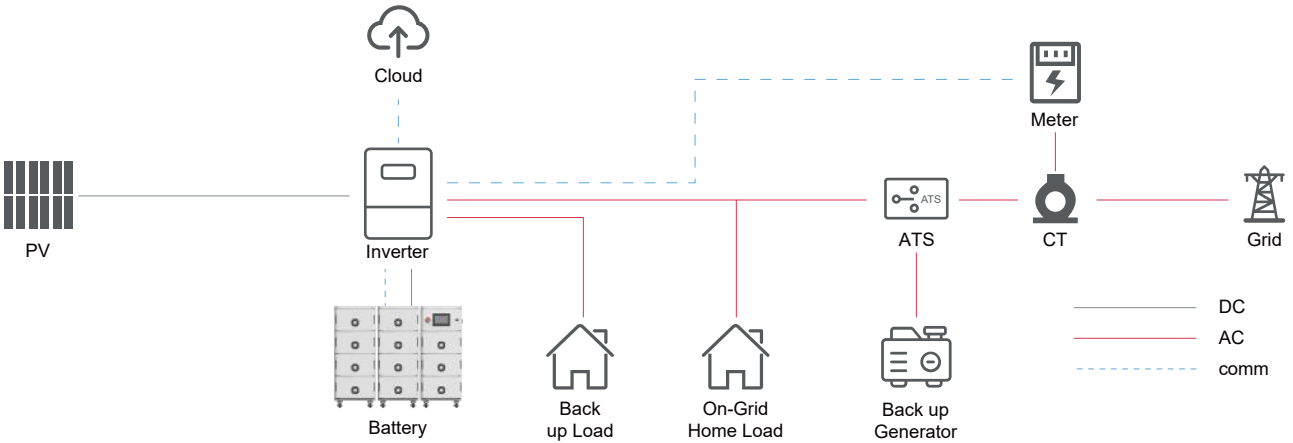
VEB 100kWh-261kWh(AF/EU)

Technical Parameters



Model	VEB series								
System									
Module Quantity	5	6	7	8	9	10	11	12	13
Nominal Capacity	100kWh	120kWh	140kWh	160kWh	180kWh	200kWh	221kWh	241kWh	261kWh
Nominal Voltage	320V	384V	448V	512V	576V	640V	704V	768V	832V
Operation Voltage Range	280-360V	336-432V	392-504V	448-576V	504-648V	560-720V	616-792V	672-864V	728-936V
Weight	813kg	963kg	1112kg	1261kg	1423kg	1572kg	1719kg	1868kg	2030kg
Battery Type	LFP								
Cell Capacity	314Ah								
Rated Charge/Discharge Current	160A(0.5C)								
Battery Module									
Module Capacity	20.09kWh								
Rated Voltage	64V								
Dimension(W*D*H)	483*941*261mm								
Weight	149kg								
General									
Cycle Life	6000 Cycles@80%DOD, 25℃								
Communication	CAN/RS485								
Altitude	<3000m								
Expansion	Max. 6 Cluster System in Parallel								
Charge/Discharge Temperature Range	Charge:0℃-55℃/Discharge:-20℃-55℃								
IP Rating	IP20								
Operating Humidity	5-95%RH(no condensation)								
Environment	Indoor								
Installation Type	Stackable Level Package((Rack Option)								
Cooling Concept	Natural Cooling								
Standard	UN38.3/CE-EMC/IEC62619/IEC 62477/IEC 63056								
Inverter Match	Deye/Solis/Megarevo etc.								
Transport testing requirement	UN38.3								

System Diagram



Small Outdoor C&I ESS Solution

VEB Series



Features and Advantages

Safe and Reliable

- High-quality LFP batteries
- Equipped with a comprehensive fire protection system including smoke, heat and water detection + suppression (aerosol)

High Economy and Efficiency

- Supports DC coupling and AC coupling solutions
- Supports peak-valley arbitrage
- Support smart scene function
- Seamless On/Off-Grid Connectivity

High integration

- Factory pre-installed, full container shipping
- Modular Design, Easy installation and maintenance
- Simple wiring

High intelligence

- One-Click Savings
- Support 7x24h remote O&M
- Smart Energy Scheduling & Dispatch
- Energy Trading

VEB 80kWh-120kWh

Technical Parameters



Model	Solis 30kW Inverter	Solis 40kW Inverter	Solis 50kW Inverter
AC Parameters			
Max. DC Input Power	60kW	80kW	100kW
MPPT Range	150-850V		
Rated DC Input Voltage	600V		
No. of MPP Trackers	3	4	4
Rated output power	30kW	40kW	50kW
Maximum output apparent power	30kVA	40kVA	50kVA
Output Frequency and Voltage	50/60Hz; 3/N/PE, 220V/380V, 3/N/PE, 230V/400V		
Max. Efficiency	97.60%		
Dimensions (W*D*H)	530*290*880mm		

Model	VEB256-80kWh	VEB320-100kWh	VEB384-120kWh
System			
Module Quantity	4	5	6
Nominal Capacity	80kWh	100kWh	120kWh
Nominal Voltage	256V	320V	384V
Operation Voltage Range	224V~288V	280V~360V	336V~432V
Rated Charge/Discharge Current	157A		
Max. Charge/Discharge Current	160A/180A		
Anti-corrosion Grade	C3/C5(Optional)		
Cycle Life	6000 Cycles@80%DOD, 25°C		
Installation Environment	Outdoor		
Communication	CAN/LAN/RS485/4G		
Cooling Concept	Air Conditioning		
Altitude	<3000m		
DC side expansion	Max. 10 Cabinets in parallel		
Charge/Discharge Temperature Range	Charge: 0-60°C, Discharge: -20-60°C		
Ingress Protection	IP55		
Dimension (W*D*H)	800*1350*2200mm		
Weight	Approx. 1056kg	Approx. 1203kg	Approx. 1350kg
Operating Humidity	≤95%RH(no condensation)		
Transport Test Requirement	UN38.3		
Battery Module			
Battery Type	LFP		
Cell Capacity	314Ah		
Module Capacity	20kWh		
Rated Voltage	64V		
Operation Voltage Range	56~72V		
Communication	CAN		
Max. Charge/Discharge Current	180A		
Dimension (W*D*H)	483*941*261mm		
Weight	147kg		

Outdoor C&I ESS Solution

VEB Series



Features and Advantages

Safe and Reliable

- High-quality LFP batteries
- Equipped with a comprehensive fire protection system including smoke, heat, and water detection + suppression (aerosol)

High Economy and Efficiency

- Supports DC coupling and AC coupling solutions
- Supports peak-valley arbitrage
- Support smart scene function
- Seamless On/Off-Grid Connectivity

High integration

- Factory pre-installed, full container shipping
- Modular Design, Easy installation and maintenance
- Simple wiring

High intelligence

- One-Click Savings
- Support 7x24h remote O&M
- Smart Energy Scheduling & Dispatch
- Energy Trading

VEB Series 140kWh-261kWh

Technical Parameters



Model	Solis 50kW Inverter	Solis 80kW Inverter	Solis 125kW Inverter
AC Parameters			
Max. DC Input Power	100kW	160kW	240kW
MPPT Range	150-850V	150-950V	150-950V
Rated DC Input Voltage	600V		
No. of MPP Trackers	4	10	10
Rated Output Power	50kW	80kW	125kW
Max. Output Apparent Power	50kVA	80kVA	125kVA
Output Frequency and Voltage	50/60Hz; 3/N/PE, 220V/380V, 3/N/PE, 230V/400V		
Max. Efficiency	97.8%	97.60%	97.60%
Dimensions (W*D*H)	530*290*880mm	1174*400*814mm	1174*400*814mm

Model	VEB448-140kWh	VEB512-160kWh	VEB576-180kWh	VEB640-200kWh	VEB704-221kWh	VEB768-241kWh	VEB832-261kWh
System Parameters							
Battery Type	LFP						
Module Quantity	7	8	9	10	11	12	13
Nominal Battery Voltage	448V	512V	576V	640V	704V	768V	832V
Nominal Battery Energy	140kWh	160kWh	180kWh	200kWh	221kWh	241kWh	261kWh
Operating Voltage Range	392-504V	448-576V	504-720V	560-720V	616-792V	672-864V	728-936V
Rated Charging Current	160A						
Rated Discharging Current	180A						
Charging Temp. Range	0°C-55°C						
Discharging Temp. Range	-20°C-55°C						
Anti-corrosion Level	C4(C5 option)						
IP Rating	IP55						
Expansion	Max. 10 Cabinets in parallel						
Communication	RS485, CAN, Ethernet						
Compatible Inverters	Solis, Deye, SAJ, Megareva etc.						
Design Certification	UN38.3/CE-EMC/IEC62619/IEC 62477/IEC 63056						
Firefighting	Aerosol, Perfluoro(optional)						
Dimension(W*D*H)	1200*1523*2300mm						
Weight(Approx.)	1790kg	1940kg	2090kg	2240kg	2390kg	2540kg	2690kg



C&I ESS Solution

VED Series — Air-cooled

Features and Advantages



Safer

- Flood, smoke and temperature detection systems, active exhaust and fire alarm batteries systems, aerosol fire extinguishing
- LFP Battery, more than 6000 charging cycles.longer service life



High performance

- Wide temperature range: -20~55°C suitable for severe cold and hot weather
- IP55 protection level, outdoor use
- No additional DC combiner cabinet or photovoltaic combiner cabinet is required the PCS cabinet has reserved interfaces



High stability

- Using pure off-grid and parallel-off-grid (parallel-off-grid handover time less than 20ms), in parallel grid scenarios



High intelligence

- Supports virtual power plants Configure local control and remote monitoring platform
- Real-time collection and monitoring of each energy storage component status information

VED 500K-1044kWh-F

Technical Parameters



Model	VED 500K-1044kWh-F	VED 1MW-2MWh-F	VED 1.5MW-3MWh-F
Battery Side			
Battery Type	LFP		
Module Energy	20.09kWh		
Number of Battery Module	52 Modules	104 Modules	156 Modules
Total Energy	1044kWh	2088kWh	3132kWh
Operating Voltage Range	728-936V		
Max. Charge/Discharge Current	0.5P		
Module Dimension(W*D*H)/Weight	483*941*261 mm/147kg		
AC Side (On Grid)			
Rated AC Power	500kW	500kW*2	500kW*3
Max. AC Power	550kW	550kW*2	550kW*3
Rated AC Current	720A	720A*2	720A*3
Rated AC Voltage	400V,3W+N+PE		
Rated Frequency	50/60Hz±5Hz		
THDi	< 3% (rated power)		
PF Adjustable Range	-1 leading~+1 lagging		
AC Side (Off Grid)			
Rated AC Voltage	400V		
Rated AC Frequency	50/60Hz		
THDi	< 3% (linear load)		
Overload Capacity	110%, normal operation; 120%, 1 minute		
General			
Cooling Concept	Air Conditioning(Battery Cabinet)		Smart Cooling(PCS)
Noise	<78dB		
Humidity Range(No condensation)	0-95%		
Altitude	3000m(>2000m Derating)		
Isolation Mode	Isolation transformer		
Fire Protection	Aerosol, Perfluoro(optional)		
Communication	RS485/CAN/Ethernet		
Temperature Range	-30~60℃(derating above 45℃)(PCS)	-20℃ to 55℃(Battery Cabinet)	
IP Rating	IP55		
Dimension(W*D*H)	1350*1450*2300mm(PCS)	1200*1523*2300mm(Battery Cabinet)	
Weight	Approx. 2200kg(PCS)	Approx. 2914kg(Battery Cabinet)	
Standard	VDE-AR-N 4110/CE-EMC/IEC62619/IEC 62477/IEC 63056 IEC 61000/IEC 62477-1:2012/IEC 61727/IEC 62116/GB/T 34120; EN 61000-6-1/EN 61000-6-2/EN 61000-6-3, GB/T 34133		
Transport Testing Requirement	UN38.3		

C&I ESS Solution

VED Series – Liquid cooled



Features and Advantages

-  **High performance**

 - C4 corrosion resistant rating
 - Wide temperature range: -20~55°C suitable for severe cold and hot weather
-  **Safe and Reliable**

 - High-quality LFP batteries
 - Equipped with a comprehensive fire protection system including smoke, heat, and water detection + suppression (aerosol)

-  **High Economy and Efficiency**

 - Supports long-term backup power
 - Supports peak-valley arbitrage
-  **High intelligence**

 - Supports virtual power plants
 - Configure local control and remote monitoring platform
 - Real-time collection and monitoring of each energy storage component status information

VED 500k-1044kWh-L

Technical Parameters



Model	VED 500k-1044kWh-L		VED 1MW-2MWh-L	
Battery Side				
Battery Type	LFP			
Module Energy	52.2kWh			
Number of Battery Module	20Modules		40Modules	
Total Energy	1044kWh		2088kWh	
Operating Voltage Range	728-936V			
Max. Charge/Discharge Current	0.5P			
Module Dimension(W*D*H)/Weight	1140*790*244mm/330±10kg			
AC Side(On Grid)				
Rated AC Power	500kW		1000kW	
Max.AC Power	550kW		1100kW	
Rated Grid Output Current	720A		1440A	
Rated Grid Voltage	400V(-15%~+10%), 3W+PE/3W+N+PE			
Rated Frequency	50/60Hz(±5Hz)			
THDi	<3%(rated power)			
Power Factor	-1(leading) ~ +1(lagging)			
General				
Cooling Concept	Liquid Cooling(Battery Cabinet)		Smart Cooling(PCS)	
Noise	<78dB			
Humidity Range(No condensation)	0-95%			
Altitude	3000m (>2000m Derating)			
Isolation Mode	Isolation transformer			
Fire Protection	Aerosol			
Communication	RS485/CAN/Ethernet			
Temperature Range	-30~60°C(derating above 45°C)(PCS) -20°C to 55°C(Battery Cabinet)			
Anti-corrosion Grade	C4(C5 Optional)			
IP Rating	IP55			
Dimension(W*D*H)	1350*1450*2300mm(PCS)		1300*1000*2300mm(Battery Cabinet)	
Weight	Approx. 2200kg(PCS)		Approx. 2075kg(Battery Cabinet)	
Standard	VDE-AR-N 4110/CE-EMC/IEC62619/IEC 62477/IEC 63056 IEC 61000/IEC 62477-1:2012/IEC 61727/IEC 62116/GB/T 34120; EN 61000-6-1/EN 61000-6-2/EN 61000-6-3, GB/T 34133			
Transport Testing Requirement	UN38.3			

Small C&I ESS Solution

VED Series – All in One



Features and Advantages

Safe and Reliable

- Overvoltage and overcurrent protection for cells packs, battery systems, and PCS
- Multi-level fire protection design

High performance

- The entire cabinet integrates PCS, BMS and EMS
- Temperature difference less than 3°C

Easy Installation

- Modular integrated design, factory pre-installed and tested
- Plug-and-play for on-site installation, easy connection, and simple configuration

High intelligence

- Equipped with Vestwoods cloud platform
- Real-time monitoring and alerts
- 24/7 remote maintenance available

VED 125k-261kWh-L

Technical Parameters



Model	VED 125k-261kWh-L
Battery Side	
Battery Type	Li-ion(LFP)
Cell Capacity	314Ah
Module Capacity	52.24kWh
Nominal Capacity	261kWh
Module Quantity	5
Operation Voltage Range	728-936V
Cycle Life	6000 Cycles @80%DOD, 25°C
Max.Charge/Discharge Current	0.5P
AC Side	
Rated AC Power	125kW
Max.AC Power	137.5kW
Rated AC Current	180A
Rated Grid Voltage	400V(-15%~+10%), 3W+PE/3W+N+PE
Rated Grid Frequency	50/60Hz(±5Hz)
Power Factor	<3%(rated power)
THDi	-1(leading) ~ +1(lagging)
General	
Cooling Concept	Liquid Cooling
Noise	<75dB(1m)
Operating Humidity(No condensation)	≤95%RH
Altitude	<3000m
Fire Protection	Aerosol, Perfluoro(optional)
Communication	RS485/CAN/Modbus TCP/RTU
Operating Temperature Range	-20°C~55°C(>45°C derating)
Anti-corrosion Grade	C4(C5 option)
Ingress Protection	Battery Pack: IP65 Cabinet: IP55
Dimension(W*D*H)	1000*1450*2300mm
Weight	Approx. 2500kg
Standard	IEC62619, IEC62477, CE-EMC, IEC63056
Transport Testing Requirement	UN38.3

Utility-Scale ESS Solution

VES Series



Features and Advantages

Safe and Reliable

- Utilizing lithium iron phosphate batteries with abuilt-in multi-level protection system ensuresexceptional thermal stability
- The system integrates an advanced fire protection system and achieves IP55 protection rating

High Economy and Efficiency

- The optimized thermal management system extends product lifespan, lowers operating costs.and delivers a higher return on investment throughout the product lifecycle

Plug-and-Play, Rapid Deployment

- Integrated design, PCS, BMS, EMS Integrated Full container shipping and installation
- Significantly reduces installation time andcommissioning costs

High intelligence

- Supports real-time online monitoring of system status

VES 1MW-2MWh-F2

Technical Parameters



Model	VES 1MW-2MWh-F2
Battery Side	
Battery Type	LFP
Cell Specifications	314Ah/3.2V
Battery Module Grouping Method	1P18S
Battery Module Capacity	18.08kWh
Battery Cluster Grouping Method	1P252S
Battery Cluster Capacity	253kWh
Battery Stack Grouping Method	8P252S
Battery Stack Capacity	2025kWh
Battery Voltage Range	706-908V
Rated Charge and Discharge Rate	0.5P/0.5P
AC Side(On Grid)	
AC Side Rated Power	125*8 kW
Rated Voltage	400Vac
Rated Frequency	50/60Hz(±5Hz)
Rated Current	1443A
Power Factor	0.99/-1~1
Output THDi	<3%
General	
Cooling Method	Air Conditioning
Fire Protection Configuration	Combustible gas detection/explosion-proof exhaust/gas fire fighting/water fire fighting
Noise	<70dB (at 1m)
Anti-corrosion Level	C4 (C5 optional)
Protection Level	IP55
Altitude	3000m (>2000m derating)
Temperature Range	-30°C-50°C
Humidity Range	0-95% (no condensation)
Communication	RS485/CAN2.0/Dry contact
Certification	IEC62619, GB/T36276, EN50549-2, VDE4110, VDE4120, G99, IEC62477/61000, etc.
Dimension(W*D*H)	6058*2438*2896mm
Total System Weight	Approx. 20t

TELECOM PRODUCT & SOLUTION

A modular, smart battery system designed for communication base station backup power applications. It integrates lithium-ion battery modules with intelligent BMS to deliver reliable, end-to-end customized backup power solutions for telecom towers, base stations, and other communication scenarios—ensuring uninterrupted operation and long-term power strategic upgrades.



Telecom Lithium-ion battery

VT4850

Intelligent lithium battery, integrated with self-designed BMS and long life LFP cells, which can be widely used in various telecom and energy storage system.

- 

Long design life
up to 15 + years @ 25°C
- 

Mobile
and flexible
- 

High rate
charge-discharge
- 

Intelligent
anti-theft solution
- 

Multiple
protection methods



Model	VT4850
Connection Method	1P15S
Nominal Energy	2.4kWh
Nominal Capacity	50Ah
Nominal Voltage	48V
Voltage Range	40.5-54V
Max. Continuous Charge Current	50A@25°C
Max. Continuous Discharge Current	50A@25°C
Recommended Charge Current	10A@25°C
Allowed Operating Temperature Range	0~60°C(Charge) -20~60°C(Discharge)
Dimension(W*D*H)	480*400*86mm
Weight	28kg
Communication	RS485

Telecom Lithium-ion battery

VT48100E

Intelligent lithium battery, integrated with self-designed BMS and long life LFP cells, which can be widely used in various telecom and energy storage system.

- 

Long design life
up to 15 + years @ 25°C
- 

Mobile
and flexible
- 

High rate
charge-discharge
- 

Intelligent
anti-theft solution
- 

Multiple
protection methods



Model	VT48100E
Connection Method	1P15S
Nominal Energy	4.8kWh
Nominal Capacity	100Ah
Nominal Voltage	48V
Voltage Range	40.5-54V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	20A@25°C
Allowed Operating Temperature Range	0~60°C(Charge) -20~60°C(Discharge)
Dimension(W*D*H)	482*400*130mm
Weight	39kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	GPS, Gyroscope, LCD etc

Telecom Lithium-ion battery

VT48150 (3U)

Intelligent lithium battery, integrated with self-designed BMS and long life LFP cells, which can be widely used in various telecom and energy storage system.

- Long design life
up to 15 + years @ 25°C
- Mobile
and flexible
- High rate
charge-discharge
- Intelligent
anti-theft solution
- Multiple
protection methods



Model	VT48150
Connection Method	1P15S
Nominal Energy	7.2kWh
Nominal Capacity	150Ah
Nominal Voltage	48V
Voltage Range	40.5-54V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	30A@25°C
Allowed Operating Temperature Range	0~60°C(Charge) -20~60°C(Discharge)
Dimension(W*D*H)	482*520*130mm
Weight	55kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	150A,GPS, Gyroscope, LCD etc

Telecom Lithium-ion battery

VT48150 (4U)

Intelligent lithium battery, integrated with self-designed BMS and long life LFP cells, which can be widely used in various telecom and energy storage system.

- Long design life
up to 15 + years @ 25°C
- Mobile
and flexible
- High rate
charge-discharge
- Intelligent
anti-theft solution
- Multiple
protection methods



Model	VT48150
Connection Method	1P15S
Nominal Energy	7.2kWh
Nominal Capacity	150Ah
Nominal Voltage	48V
Voltage Range	40.5-54V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	30A@25°C
Allowed Operating Temperature Range	0~60°C(Charge) -20~60°C(Discharge)
Dimension(W*D*H)	482*450*177mm
Weight	55kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	150A,GPS, Gyroscope, LCD etc

Telecom Lithium-ion battery

VT48200B

Intelligent lithium battery, integrated with self-designed BMS and long life LFP cells, which can be widely used in various telecom and energy storage system.

- 

Long design life
up to 15 + years @ 25°C
- 

Mobile
and flexible
- 

High rate
charge-discharge
- 

Intelligent
anti-theft solution
- 

Multiple
protection methods



Model	VT48200
Connection Method	1P15S
Nominal Energy	9.6kWh
Nominal Capacity	200Ah
Nominal Voltage	48V
Voltage Range	40.5-54V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	40A@25°C
Allowed Operating Temperature Range	0~60°C(Charge) -20~60°C(Discharge)
Dimension(W*D*H)	482*490*222mm
Weight	78kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	200A,GPS, Gyroscope, LCD etc

Telecom Lithium-ion battery

VT48314



Intelligent lithium battery, integrated with self-designed BMS and long life LFP cells, which can be widely used in various telecom and energy storage system.

- 

Long design life
up to 15 + years @ 25°C
- 

Mobile
and flexible
- 

High rate
charge-discharge
- 

Intelligent
anti-theft solution
- 

Multiple
protection methods



Model	VT48314
Connection Method	1P15S
Nominal Energy	15.07kWh
Nominal Capacity	314Ah
Nominal Voltage	48V
Voltage Range	40.5-54V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	60A@25°C
Allowed Operating Temperature Range	0~60°C(Charge) -20~60°C(Discharge)
Dimension(W*D*H)	445*600*222mm
Weight	103kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	200A,GPS, Gyroscope, LCD etc

Telecom Smart Lithium-ion Battery

VT48100E-ST

Intelligent telecom backup LFP battery, integrated with self-developed BMS, long-life LFP cells and DC-DC function, which can be widely used in various telecom and energy storage system.

- 

Long design life
up to 15 + years @ 25°C
- 

DC-DC function
compatible with VRLA
& old LFP battery
- 

High rate
charge-discharge
- 

Intelligent
anti-theft solution
- 

Multiple
protection methods



Telecom Sodium-ion Battery

VST48100

NEW

Intelligent sodium-ion battery, integrated with self-developed BMS and advanced sodium-ion cell technology, which can be widely used in various telecom and energy storage systems. It delivers extraordinary cycle life, excellent wide-temperature performance, and enhanced safety for reliable communication backup power.

- 

Extraordinary long
lifetime and cycle life
- 

Wide temperature
tolerance
- 

Self-developed BMS
and DCDC technology
- 

With SNMP and TCP/IP
to remotemonitoring
- 

3 levels protection
from cel topack



Model	VT48100E-ST
Connection Method	1P15S
Nominal Energy	4.8kWh
Nominal Capacity	100Ah
Nominal Voltage	48V
Voltage Range	40.5-54V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	15A@25°C
Allowed Operating Temperature Range	0~60°C(Charge) -20~60°C(Discharge)
Dimension(W*D*H)	482*450*130mm
Weight	43kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	Peak Shaving/Mix Up with Lead-acid/Normal Lithium Battery

Model	VST48100
Connection Method	1P10S
Nominal Energy	4.8kWh
Nominal Capacity	100Ah
Nominal Voltage	48V
Voltage Range	48-57V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	50A@25°C
Allowed Operating Temperature Range	-10°C~60°C(Charge) -20°C~60°C(Discharge)
Dimension(W*D*H)	480*550*200mm
Weight	46kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	GPS, Gyroscope, LCD etc

Telecom Sodium-ion Battery

VST48150



Intelligent sodium-ion battery, integrated with self-developed BMS and advanced sodium-ion cell technology, which can be widely used in various telecom and energy storage systems. It delivers extraordinary cycle life, excellent wide-temperature performance, and enhanced safety for reliable communication backup power.

- Extraordinary long lifetime and cycle life
- Self-developed BMS and DCDC technology
- With SNMP and TCP/IP to remotemonitoring
- 3 levels protection from cel topack



Model	VST48150
Connection Method	1P16S
Nominal Energy	7.2kWh
Nominal Capacity	150Ah
Nominal Voltage	48V
Voltage Range	48-57V
Max. Continuous Charge Current	100A@25°C
Max. Continuous Discharge Current	100A@25°C
Recommended Charge Current	75A@25°C
Allowed Operating Temperature Range	-10°C~60°C(Charge) -20°C~60°C(Discharge)
Dimension(W*D*H)	442*650*220mm
Weight	80kg
Communication	RS485 CAN/SNMP(Optional)
Function(Optional)	GPS, Gyroscope, LCD etc

Telecom Outdoor Cabinet

VTS SYSTEM



Intelligent outdoor telecom cabinet, integrated with self-designed power supply and thermal management system, which can be widely used in various telecom and energy storage scenarios.

- Remote monitoring
- Integrated design
- Scalable
- Three-level protection



Model	VTS System
Configuration	
Power Supply	36kW
Aircon	DC 48V, 3000W
Battery	48V100Ah
Specification	
Dimension (W*D*H)	750*750*2200mm
Operating Temperature Range	-40°C ~ +75°C
Storage Temperature Range	-50°C ~ +75°C
Relative Humidity	≤95%
Protection	IP55
AC Input Specifications	
Mains Input Configuration	3-Phase 380Vac
Power Factor	≥0.99
Frequency	45Hz ~ 65Hz
AC Input Breaker	125A/4P & 32A/4P
AC SPD	20kA (8/20us)
DC Output Specifications	
Nominal Output Voltage	48Vdc
Output Power	36kW
Efficiency	>96%(30-70% load)& 97% peak
Design Standards	
Electrical Safety	EN/IEC 62368
EMC	EN55022/CISPR22 Class B, EN61000-4-2/-3/-4/-5/-11

UPS BACKUP BATTERY SOLUTION

A high-reliability, full-range UPS power supply system integrating intelligent voltage regulation, seamless switching and multi-level protection, delivering stable, continuous and safe power guarantee for data centers, communication rooms, industrial workshops and commercial buildings, effectively preventing power anomalies and supporting secure operation and long-term stable development of core equipment.



UPS LFP HV-Battery Product Portfolio

VES096020

VES series LFP battery is specifically designed for small UPS systems, servers, and network devices. It supports >3C discharge for instant backup during outages. With drop-in compatibility, it directly replaces lead-acid batteries. It offers 2-3x longer life, 60% weight reduction, and a built-in BMS for full protection. Multiple units can be easily paralleled for higher capacity. Perfect for home offices, POS systems, and edge computing.

-  Extraordinary long lifetime and cycle life
-  Self-developed BMS and DCDC technology
-  With SNMP and TCP/IP to remotemonitoring
-  3 levels protection from cel topack



Model	VES096020
Cell Type	LFP
Rated Battery Voltage	96V(1P30S)
Operating Battery Voltage	84~106V
Rated Capacity	20Ah
Battery Capacity	1920Wh
Rated CH Current	10A (0.5C)
Maximum Continuous CH Current	20A (1C)
Rated DCH Current	20A (1C)
Maximum Continuous DCH Current	60A (3C)
Altitude	≤2000m
Operating Temp. Range	CH: 0~55°C, DCH: -20C~55°C
Humidity Range	≤95%RH
Communication	CAN, RS485, dry contact(DO*2, DI*2)
IP Rating	IP20
Dimension (W*D*H)	482*600*88mm
Design Certification	EN61000, IEC62619, UL1973, UL9540A
Paralleling	The maximum number of parallel connections is 24.
Series-parallel Connection	±96V, 192V, ±192V, 384V (Maximum 6 clusters in parallel)



Standby power duration of systems with different cluster numbers under different power UPS

The battery system adopts a standardized and modular design. Each cabinet constitutes an independent battery group, and the battery capacity can be flexibly expanded according to the load power. The maximum number of cabinets that can be connected in parallel is 20.

UPS(kW)	Operating Battery Voltage	UPS Efficiency	Power Factor	DOD/%	96V20Ah Battery Module Quantity		
					1	2	4
3	96V	92%	0.9	90%	41.7	/	/
5	192V	94%	1	90%	/	44.1	/
6	192V	94%	1	90%	/	36.8	/
8	±192V	94%	1	90%	/	/	55.1
10	±192V	94%	1	90%	/	/	44.1
15	±192V	94%	1	90%	/	/	29.4
20	±192V	94%	1	90%	/	/	22.1

UPS LFP HV-Battery Product Portfolio

FLEXLI SERIES 3C BATTERY

FlexLi series battery is designed for UPS systems requiring instant high power. It supports 3C discharge, ensuring seamless backup during grid interruptions. Compared to lead-acid, it offers 50% weight reduction, 10+ years life, and faster recharge. With an intelligent BMS for real-time monitoring, it provides a safe, maintenance-free, and compact solution for data centers and critical infrastructure.

- 

Extraordinary long lifetime and cycle life
- 

Self-developed BMS and DCDC technology
- 

With SNMP and TCP/IP to remotemonitoring
- 

3 levels protection from cel topack



Model	FlexLi-512100V2
Battery Module	
Rated Battery Voltage	51.2V
Rated Capacity	100Ah
Dimension (W*D*H)	483*580*133mm
Weight	43.2kg
Battery System	
System Composition	10 modules + 1 high-voltage box + 1 communication box
Rated Battery Voltage	512V
Battery Capacity	51.2kWh
Maximum Continuous CH/DCH Current	100/300A
Dimension (W*D*H)	600*1000*2000mm
Weight	600kg
Communication	CAN, RS485, DI/DO, SNMP(Optional)
Operating Temp. Range	0~45°C
Protection	Excessive/insufficient voltage, excessive/Insufficient temperature, overcurrent, short circuit, etc.



FlexLi series seamlessly integrates with most existing UPS systems, making it an ideal drop-in replacement for lead-acid batteries. Thanks to its advanced BMS, up to 8 units can be connected in parallel without complex external controls, allowing effortless power expansion. This design ensures high system redundancy and reliability, providing a flexible and scalable energy solution for data centers and industrial applications.

UPS Power (kW)	Power of Battery kW (n=96%)	512V/100Ah Number of battery system clusters									
		1	2	3	4	5	6	7	8	9	10
100	104.17	23.8	54.9	78.1	99.9	124.9	152.1	184.6	199.8	234.8	279.8
150	156.25	12.2	35	54.9	79.1	92	99.7	123.8	129.9	159.7	180.2
200	208.33		23.9	39.6	55.2	66.9	85.2	90.9	99.8	114.8	124.9
250	260.42		17.8	30.2	44.7	54.9	64.9	78	89.8	195	100.1
300	312.50		12.1	24.2	35.1	45.3	55.3	64.8	69.8	80	91.9
400	416.67			16.3	23.9	31.9	41.1	47.7	54.8	59.8	67.7
500	520.83				17.9	24.2	30	34.9	44.9	48.9	54.8
600	625.00				11.9	18.3	24.3	28.7	34.9	39.8	44.9
700	729.17					15.1	20.6	23.7	29.8	33.9	39.9
800	833.33						16	21.9	25.8	30.7	33.9

UPS LFP HV-Battery Product Portfolio

FLEXLI SERIES 7C BATTERY

FlexLi series battery is designed for UPS systems requiring instant high power. It supports 7C discharge, ensuring seamless backup during grid interruptions. Compared to lead-acid, it offers 50% weight reduction, 10+ years life, and faster recharge. With an intelligent BMS for real-time monitoring, it provides a safe, maintenance-free, and compact solution for data centers and critical infrastructure.

- Extraordinary long lifetime and cycle life
- Self-developed BMS and DCDC technology
- With SNMP and TCP/IP to remotemonitoring.
- 3 levels protection from cel topack.



Model	FlexLi-Ultra 51285
Battery Module	
Rated Battery Voltage	64V
Rated Capacity	85Ah
Dimension (W*D*H)	483*580*156mm
Weight	52.6kg
Battery System	
System Composition	8 modules + 1 high-voltage box + 1 communication box
Rated Battery Voltage	512V
Battery Capacity	43.52kWh
Maximum Continuous CH/DCH Current	85/600A
Dimension (W*D*H)	600*1000*2000mm
Weight	620kg
Communication	CAN, RS485, DI/DO, SNMP(Optional)
Operating Temp. Range	0~45°C
Protection	Excessive/insufficient voltage, excessive/insufficient temperature, overcurrent, short circuit, etc.



FlexLi series seamlessly integrates with most existing UPS systems, making it an ideal drop-in replacement for lead-acid batteries. Thanks to its advanced BMS, up to 8 units can be connected in parallel without complex external controls, allowing effortless power expansion. This design ensures high system redundancy and reliability, providing a flexible and scalable energy solution for data centers and industrial applications.

Load Power (kW)	Number of battery system clusters (FlexLi-Ultra)							
					1	2	4	4
80	31.3	62.7	94.0	125.3	156.7	188.0	219.3	250.7
100	25.1	50.1	75.2	100.3	125.3	150.4	175.5	200.5
150	16.7	33.4	50.1	66.8	83.6	100.3	117.0	133.7
200	12.5	25.1	37.6	50.1	62.7	75.2	87.7	100.3
250	10.0	20.1	30.1	40.1	50.1	60.2	70.2	80.2
300		16.7	25.1	33.4	41.8	50.1	58.5	66.8
400		12.5	18.8	25.1	31.3	37.6	43.9	50.1
500		10.0	15.0	20.1	25.1	30.1	35.1	40.1
600			12.5	16.7	20.9	25.1	29.2	33.4
750			10.0	13.3	16.7	20.1	23.4	26.8
1000				10.0	12.5	15.0	17.5	20.1

TRUSTED GLOBAL GUARANTEE

All batteries are covered by PAIC's global product liability insurance, providing reliable protection regardless of warranty status.



*PAIC: Ping An Insurance (Group) Company of China. Ltd., founded in 1988, is a Fortune Global 500 enterprise and one of the world's largest insurance groups.