



Energy Revolution

Customer-centricity is our pursuit and we are committed to creating a sustainable green home for everyone, where you will have a one-stop wonderful experience.

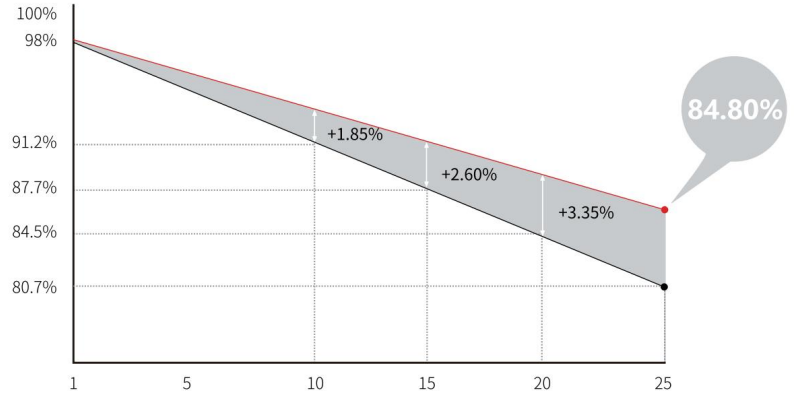


SOLAR PANELS

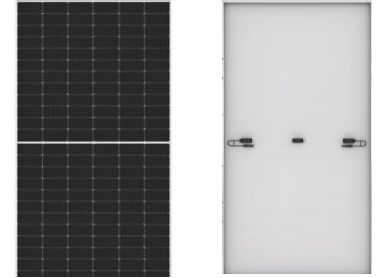
540~560M



- Based on M10 wafer,best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
- Excellent outdoor power generation performance
- High module quality ensures long-term reliability



25-Year Power Warranty



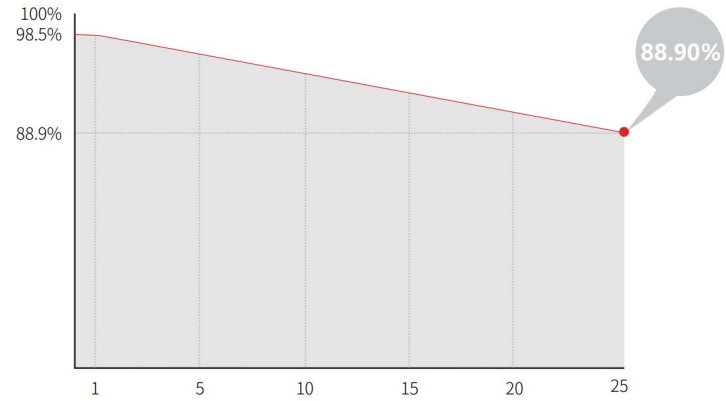
Datasheet

Product Grade	Grade A
Module Efficiency	21.30%
Production Warranty	25 Years
Size	2278*1134*30mm
Weight	27.5 KG
Operational Temperature	40°C~+85°C
Power Output Tolerance	0~3%
Maximum System Voltage	DC1500V(IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C

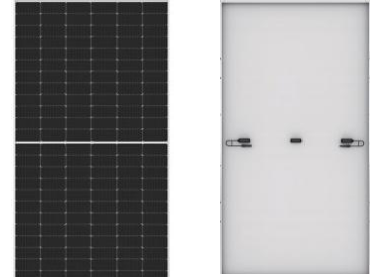
560~575M



- Suitable for distributed projects
- Excellent outdoor power generation performance
- High-quality components ensure long-term reliability



25-Year Power Warranty



Datasheet

Product Grade	Grade A
Module Efficiency	22.10%
Production Warranty	25 Years
Size	2278*1134*30mm
Weight	27.5 KG
Operational Temperature	40°C~+85°C
Power Output Tolerance	0~3%
Maximum System Voltage	DC1500V(IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C

USER STORIES

Canadian artist Nick opens a mechanical workshop where he uses his talents to create endless fun. However, daily electricity costs are relatively high, with tens of thousands of kilowatt-hours of electricity consumed every month. So Nick found us and decided to purchase and install 40 high-efficiency photovoltaic modules to obtain a steady stream of powerful energy from sunlight.



After extensive site visits and project analysis, we determined that the studio was located on a narrow road and that ground-level facilities could not be fully utilized. However, installing photovoltaic plants on vast and underutilized rooftops to harvest the sun's energy can make up for the space at ground level. At the same time, it can coexist harmoniously with the original beautiful environment of the community. It is worth mentioning that the investment payback period of this independent photovoltaic power station is only 3 years.



INVERTER

MIN 3000~7600TL -XH-US



·Battery Ready for DC Coupled and AC Coupled systems

·With backup power and dark start operations

·Support RSD and AFCI

·Support multiple energy management modes:

Self-consumption, Zero Export, TOU and Off-grid

·Comply with UL1741SA, CA Rule 21 & HECO

·Integrate diesel generator to charge battery for optimal energy management

Datasheet	MIN3000TL-XH-US	MIN3800TL-XH-US	MIN5000TL-XH-US	MIN6000TL-XH-US	MIN7600TL-XH-US
Input Data(PV)					
Max,Recommended PV Power(STC)	6000W	7600W	10000M	12000W	15200W
DC/AC Ratio	2				
Max.DC System Voltage	600v				
Startup Voitage	50V				
Full load voltage range	130-500v	160-500v	210-500V	170-500	210-500V
Nominal Voltage	360V				
Operating Voltage Range	50-550V/LG Battery:50~450v				
No.of MPPT	2	2	2	3	3
No.of PV Strings per MPPT	2/2	2/2	2/2	2/2/2	2/2/2
Max.Input Current per MPPT	13.5A				
Max,Short -circuit Current per MPPT	16.9A				
Input/Output Data(Battery)					
I/O voltage Range	ARO Battery :360V~550V/LG Battery:350V~450V				
Nominal DC Voltage	400V				
I/O DC Current	9A/9A	11.5A/11.5A	15A/15A	18A/18A	23A/23A
I/O DC Power	3200	4000W	5200W	6200W	7800W
Battery Technology	LFP/NMC				
Battery Capacity per Module	9.9kWh/10kWh,16kWh				
Scalability	Up to 4/Up to 2 in parallel				
Compatible Batterys	ARO HV battery /LG Prime (Gen3)battery				
Output Data(AC)					
AC Nominal Power@240V AC	3000W	3800W	5000W	6000W	7600W
AC Nominal Power@208VAC	2600W	3290W	4330W	5200W	6580W
Max. AC Apparent Power	3000VA	3800VA	5000VA	6000VA	7600VA
Nominal AC Voltage	208V/240V				
AC Voltage Ronge @208VAC @240V AC	183V-229V/211V-264V				
AC Grid Frequency	50/60Hz				
AC Grid Frequency Range	45~65Hz				
Max.Output Current	12.5A	16A	21A	25A	32A
Power Factor(@Nominal Power)	>0.99				
Adjustable Power Factor	0.8 Leading-0.8 Lagging				
THDi	<3%				
AC Gnid Connection Type	L1/L2/N/PE				

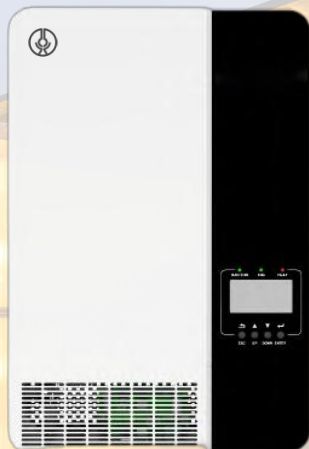
MIN 8200~11400TL -XH-US



- Battery Ready for DC Coupled and AC Coupled systems
- With backup power and dark start operations
- Support RSD and AFCI
- Support multiple energy management modes:
Self-consumption, Zero Export, TOU and Off-grid
- Comply with UL1741SA, CA Rule 21 & HECO
- Integrate diesel generator to charge battery for optimal energy management

Datasheet	MIN8200TL-XH-US	MIN9000TL-XH-US	MIN10000TL-XH-US	MIN11400TL-XH-US
Input Data(PV)				
Max. Recommended PV Power(STC)	16400W	18000M	20000W	22800W
DC/AC Ratio				2
Max. DC System Voltage				600v
Startup Voltage				50V
Fullload voltage range	170-500V	190-500V	210-500V	235-500V
Nominal Voltage				360V
Operating Voltage Range				50-550V/LG Battery:50-450V
No.of MPP Trackers				4
No.of PV Strings per MPP Trackers				2
Max,Input Current per MPP Trackers				13.5A
Max.Short-circuit current per MPP trackers				16,9A
Input/Output Data(DC)				
Battery Voltage Range	ARO Battery :360V~550V/LG Battery:350V~450v			
Nominal DC Voltage	400v			
I/O DC Current	24A/24A	27A/27A	30A/30A	34A/34A*
I/O DC Power	8500W	9300W	10300W	11700W
Battery Technology	LFP/NMC			
Battery Capacity per Module	9.9kWh/10kWh,16kWh			
Scalability	Up to 4/Up to 2 in parallel			
Compatible Batterys	ARO HV battery/LG Prime (Gen3)battery			
Output Data(AC)				
AC Nominal Power@240V AC	8200W	9000W	10000W	11400W
AC Nominal Power@208V AC	7280W	7900W	8735W	9880W
Max.AC Apparent Power	8200VA	9000VA	10000VA	11400VA
Nominal AC Voltage	208V/240N			
AC Voltage Range @208VAC @240VAC	183V~229V/211V~264V			
AC Grid Frequency	50/60Hz			
AC.Grid Frequency Range	45 ~ 65Hz			
Max. Output Current	35A	38A	42A	48A
Power Factor(@Nominal Power)	>0.99			
Adjustable Power Factor	0,8 leading~0.8 lagging			
THDI	<3%			
AC Grid Connection Type	L1/L2/N/PE			

SPF 3000~3500TL LVM-US



- Integrated MPPT charge controller
- Equalization charging function
- Work with or without battery
- PV input voltage up to 280VDC
- Generator connection available
- Configurable grid or solar input priority
- Optional WIFI/GPRS remote monitoring
- Support parallel operation for capacity expansion up to 21kW
- PV and grid power the load jointly if PV energy is insufficient
- Flexibly schedule the Inverter charging and discharging time

Datasheet	SPF 3000TL LVM-US	SPF 3500TL LVM-US
Battery Voltage	48VDC	
Battery Type	Lithium/Lead-acid	
Inverter Output		
Rated Power	3000VA/3000W	3500VA/3500W
Parallel Capability	Yes, 6 units maximum	
AC Voltage Regulation (Battery Mode)	100Vac/110Vac/120Vac @50/60Hz	
Surge Power	6000VA	7000VA
Efficiency (Peak)	90%	
Waveform	Pure sine wave	
Transfer Time	10ms typical, 20ms Max	
Solar Charger		
Maximum PV Array Power	4000W	4500W
MPPT Range @Operating Voltage	120VDC ~ 225VDC	
Number of Independent MPP Trackers/strings per MPP tracker	1/1	
Maximum PV Array Open Circuit voltage	280VDC	
Maximum Solar Charge Current	80A	
AC Charger		
Charge Current	40A	
AC Input Voltage	120VAC	
Selectable Voltage Range	95-140VAC (For Personal Computers); 65-140VAC (For Home Appliances)	
Frequency Range	50Hz/60Hz (Auto sensing)	
Physical		
Protection Degree	IP 20/NEMA Type 1	
Dimension (W/H/D)	330/485/135mm (13/19.1/5.3in)	
Net Weight	12kg (26.5lb)	
Operating Environment		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	0°C-50°C (32°F-122°F)	
Storage Temperature	-15°C-60°C (5°F-140°F)	

SPF 4000T~12000T DVM-US



- Low frequency inverter 120/240Vac Split Phase output
- Integrated MPPT charge controller
- Optionl WIFI/GPRS remote monitoring
- Built-in pure copper low frequency transformer
- Configurable grid or solar input priority
- Generator connection available

Datasheet	SPF4000TDVM-US	SPF5000TDVM-US	SPF6000TDVM-US	SPF8000TDVM-US	SPF10000TDVM-US	SPF12000TDVM-US
Battery Voltage	48VDC					
Battery Type	Lithium/Lead-acid					
Inverter Output						
RatedPower	4KW	5KW	6KW	8KW	10kW	12KW
Surge Rating	12KW	15KW	18KW	24KW	30KW	36KW
Waveform	Pure sine wave/same as input (bypass mode)					
Nominal Output Voltage RMS	104-110-115-120/208-220-230-240VAC[optional]					
Output Frequency	50Hz/60Hz +/-0.3 Hz					
Inverter Efficiency(Peak)	>85%					
Transfer Time	10ms(max)					
Solar Charger						
Maximum PV Charge Current	80A		120A			
Maximum PV Array Power	5000W		7000W			
Number of independent MPP trackers/strings MPP tracker	1/1		2/1			
MPPT Range @ Operating Voltage(VDC)	60~145VDC		60~145VDC			
Maximum PV Array Open Circuit Voltage	150VDC		150VDC			
Maximum Efficiency	>98%		>98%			
AC Input						
Voltage	240VAC					
Selectable Voltage Range	184~272VAC(UPS);154~272VAC(APL)					
Frequency Range	50Hz/60Hz (Auto sensing)					
Max.Charging Current	40A	50A	60A	70A	80A	100A
Mechanical Specifications						
Protection Degree	IP20/NEMA Type 1					
Dimensions (WH/D)	360/540/218mm (14.2/21.3/8.6in)	360/540/218mm (14.2/21.3/8.6in)	360/540/218mm (14.2/21.3/8.6in)	380/650/225mm (15/25.6/8.6in)	380/650/225mm (15/25.6/8.6in)	380/650/225mm (15/25.6/8.6in)
Weight	42kg(92.61b)	47kg(103.6lb)	52kg(114.6lb)	64kg(141.1lb)	66kg(145.51lb)	75kg(165.31lb)
OperatingEnvironment						
Operation Temperature Range	0°C-50°C(32°F-122°F)					

SPF 6000T~12000T DVM-US MPV



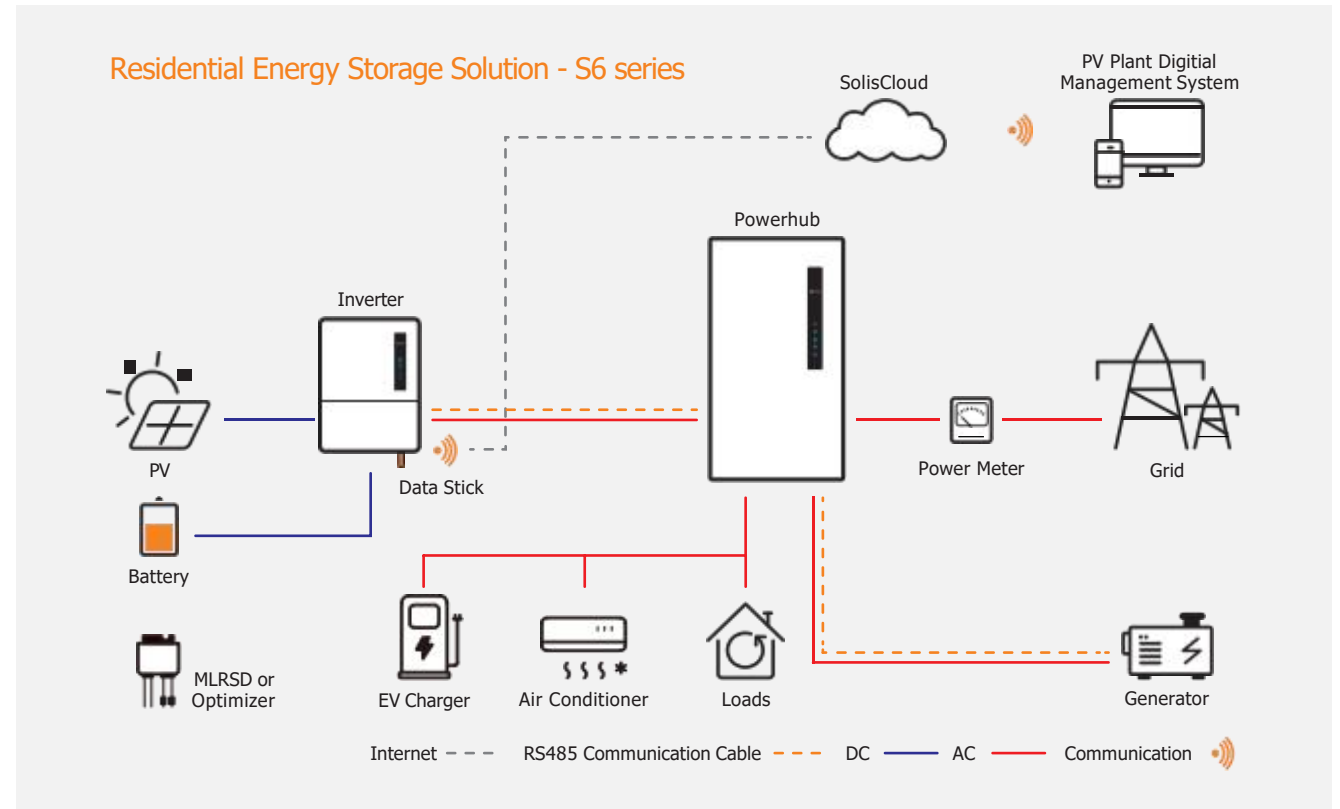
- Low frequency inverter 120/240Vac Split Phase output
- Integrated MPPT charge controller
- OptionDI WIFI/GPRS remote monitoring
- Built-in pure copper low frequency transformer
- Configurable grid or solar input priority
- Generator connection available

Datasheet	SPF6000TDVM-USMPV	SPF12000TDVMH-USMPV
Battery Voltage	48VDC	
Battery Type	Lithium/Lead-acid	
INVERTER OUTPUT		
Rated Power	6kW	12kW
Surge Rating	18KW	36KW
Waveform	Pure sine wave/same as input (bypass mode)	
Nominal Output Voltage RMS	104-110-115-120/208-220-230-240VAC(optional)	
Output Frequency	50Hz/60Hz +/-0.5 Hz	
Inverter Efficiency(Peak)	88%	
Transfer Time	10ms	
SOLAR CHARGER		
Maximum PV Charge Current	80A	120A
Maximum PV Array Power	5000W	7000W
Number of independent MPP trackers/strings Mpp tracker	1/1	2/1
MPPT Range @Operating Voltage(VDC)	60~245VDC	
Maximum PV Aray Open Circuit Voltage	250V	
Maximum Efficiency	97%	
AC INPU		
Voltage	240VAC	
Selectoble Voltage Range	184~272VAC(UPS);154~272VAC(APL)	
Frequency Range	50Hz/60Hz(Auto sensing)	
Max.Charging Current	60A	100A
Mechanical Specifications		
Protection Degree	IP20/NEMA Type 1	
Dimensions [W/H/D]	360/540/218mm (14.2/21.3/8.6in)	380/650/225mm (15/25.6/8.6in)
Weight	52kg(114.6lb)	75kg (165.3lb)
OperatingEnvironment		
Operation Temperature Range	0°C-50°C (32°F-122°F)	
Altitude	<2000m(6561.6ff)	

Residential Energy Storage Solutions



The residential energy storage range uses powerful inverters designed to provide energy storage solutions for photovoltaic systems to Achieve the goal of zero carbon life.





BATTERY

Battery- 5000U 10KWH



- Vertical industry integration ensures more than 6000 cycles with 80%DoD
- Each battery with independent BMS system manages power output smartly and effectively.
- Modular design gives the end customers the power of choice of capacity Deliver up to 140KW with single max module(10.24KWh)at 14pcs parallel connection.
- Compatible with most of the available Hybrid inverters.

Datasheet

Model No	5000U-5KWH	7000U-7KWH	10000U-10KWH
Nominal Parameters			
Voltage	51.2V	51.2V	51.2V
Capacity	100Ah	150Ah	200Ah
Energy	5.12Kwh	7.68Kwh	10.24 Kwh
Dimensions (LxWxH)	680 x480 x180(220)mm	680 x480 x180(220)mm	680x480x180(220)mm
Weight	60.5kc	79.5kg	102.5kc
Basic Parameters			
Life time(25°C)	10 years		
Life cycles(80%DOD,25°C)	6000Cycles		
Storage time /temperature	5 months @25°C;3 months @35C;1month @45°C		
Operation temperature	-20°C to 60°C @60+/-25%Relative Humidity		
Storage temperature	0°C to 45°C @60+/-25%Relative Humidity		
Lithium Battery Standard	UL1642,IEC62619,UN38.3,ROHS,CE-EMC		
Enclosure protection rating	IP21		
Electrical Parameters			
Operation voltage	44-58 Vdc	44-58 Vdc	44-58 Vdc
Max.charging voltage	58 Vdc	58 Vdc	58 Vdc
Max.charging and discharging current	100A	100A	100A
Max Power	5120W	7680W	10240W

Battery- 15000U 15KWH



- Vertical industry integration ensures more than 3000 cycles with 80%DoD
- Each battery with independent BMS system manages power output smartly and effectively.
- Modular design gives the end customers the power of choice of capacity Deliver up to 217KW with single max module(15.54KWh)at 14pcs parallel connection.
- Compatible with most of the available Hybrid inverters.

Datasheet

Model No 15000U -15KWH

Nominal Parameters

Voltage 51.8V

Capacity 300Ah

Energy 15.54Kwh

Dimensions(LxWxH) 840 x600 x235mm

Weight 128kg

Basic Parameters

Life time(25°C) 10 years

Life cycles(80%DOD,25°C) 3000Cycles

Storage time /temperature 5 months @25°C;3 months @35C;1month @45°C

Operation temperature -20°Cto 60°C@60+/-25%Relative Humidity

Storage temperature 0°Cto 45°C@60+/-25%Relative Humidity

Lithium Battery Standard UL1642,IEC62619,UN38.3,ROHS,CE-EMC

Electrical Parameters

Operation voltage 44-58 Vdc

Max. charging voltage 58 Vdc

Max. charging and discharging current 100A

Max Power 5120W

051200A-B GBP2



- Vertical industry integration ensures more than 6500 cycles with 80%DoD
- Each battery with independent BMS system manages power output smartly and effectively.
- Modular design gives the end customers the power of choice of capacity Deliver up to 163KW with single max module(10.24KWh) at 16pcs parallel connection.
- Compatible with most of the available Hybrid inverters.

Datasheet

Model No	051200A-B-GBP2	
Nominal Parameters		
Battery Chemistry	LiFePO4	
Voltage	51.2V	
Operating Voltage	46-56V	
Capacity	200Ah	
Energy	10.24Kwh	
Scalability	Max.16pcs in parallel (162kWh)	
Usable Energy	9.22Kwh	
Charge/Discharge Current	Recommend	100A
	Max.	150A
	Peak(2mins,25°C)	200A
Basic Parameters		
Recommend Depth of Discharge	80%	
Dimension (W/H/D)	720*550*200mm / 28.3*21.6*7.8 in	
Weight Approximate	102.5kgs / 225 lbs	
Master LED Indicator	4 LED (SOC:25%~100%)	
	2 LED (working, alarming, protecting)	
IP Rating of Enclosur	IP20	
Working Temperature	Charge:0°C~55°C Discharge:-20°C~55°C	
Storage Temperature	0°C~35°C	
Humidity	5%~95%	
Altitude	≤2000m	

ZN- P48100ESA1



- Each module is equipped with an independent BMS system
- Safe lithium ion phosphate battery cell.
- Compact size ultralight module
- Equipped with intelligent BMS for each battery pack to manage modules effectively
- Household energy storage systems; Centralized power station energy storage system.

Datasheet

Model No	ZN-P48100ESA1
Nominal Voltage	48V
Nominal Capacity	100Ah
Power	4.8Kwh
Dimensions (L*w*h)	442* 500*130mm
Weight	40kg
Discharge Voltage	45-54V
Charge Voltage	52.5-54V
Max Discharge Current	100A
Max Charge Current	100A
Communication	RS232,RS485,CAN
Charging Temperature	0 °C-50°C
Discharging Temperature	-20 °C-55°C
Shelf Temperature	-20 °C-60°C
Certification	IEC/CE/UN38.3
Design Life	20+Years (25°C/77°F)
Cycle Life	>6500 (80% DoD)

ZN- P48400ESA1



- Each module is equipped with an independent BMS system
- Safe lithium ion phosphate battery cell.
- Compact size ultralight module
- Equipped with intelligent BMS for each battery pack to manage modules effectively
- Household energy storage systems; Centralized power station energy storage system.

Datasheet				
Model No	ZN-P48100ESA1	ZN-P48200ESA1	ZN-P48300ESA1	ZN-P48400ESA1
Nominal Voltage	48V	48V	48V	48V
Nominal Capacity	100Ah	200Ah	300Ah	400Ah
Power	4.8Kwh	9.6Kwh	14.4Kwh	19.2Kwh
Dimensions (L*w*h)	442* 500*130mm	442*500*130mm*2	442*500*130mm*3	442*500*130mm*4
Weight	40kg	80kg	120kg	160kg
Discharge Voltage	45-54V	45-54V	45-54V	45-54V
Charge Voltage	52.5-54V	52.5-54V	52.5-54V	52.5-54V
Max Discharge Current	100A	200A	300A	400A
Max Charge Current	100A	200A	300A	400A
Communication	RS232,RS485,CAN	RS232,RS485,CAN	RS232,RS485,CAN	RS232,RS485,CAN
Charging Temperature	0 °C-50°C	0 °C-50°C	0 °C-50°C	0 °C-50°C
Discharging Temperature	-20 °C-55°C	-20 °C-55°C	-20 °C-55°C	-20 °C-55°C
Shelf Temperature	-20 °C-60°C	-20 °C-60°C	-20 °C-60°C	-20 °C-60°C
Certification	IEC/CE/UN38.3	IEC/CE/UN38.3	IEC/CE/UN38.3	IEC/CE/UN38.3
Design Life	20+Years (25°C/77°F)	20+Years (25°C/77°F)	20+Years (25°C/77°F)	20+Years (25°C/77°F)
Cycle Life	> 6500 (80% DoD)	> 6500 (80% DoD)	> 6500 (80% DoD)	> 6500 (80% DoD)