

DATA CENTER

Power Supply Solutions

Our advanced battery solution is optimized for next-generation data centers, boasting a compact design, extended lifespan, high discharge rates, and seamless integration with modern infrastructure demands.



Power Technology

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DATA CENTER POWER SOLUTION

PART 1 **DPS** **01**
PS SERIES

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UPS SERIES

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UE-HP SERIES

ENTERPRISE POWER SOLUTION

PART 1 **Rack-mount UPS system** **13**
UPS SERIES

PART 2 **Lithium Battery** **23**
SERIE UE-HP

High Voltage DC

PS SERIES

PS310DC & PS510DC

PS310DC

PS510DC



Battery independence

Master Battery DPS systems focus on the independence of each part of the power supply. The combination of redundant technology and battery backup design ensures that even if one part fails, the whole system can operate stably. In addition, the local power supply is designed with safety and thermal efficiency in mind, providing you with a long-lasting and reliable power solution.

Reduced distribution losses

Our distributed power supply design helps reduce transmission and distribution losses, saving you money. At the same time, Master Battery DPS can also reduce the need for new distribution stations, further reducing your investment costs.

Design Flexibility

We understand the variability of power requirements. Master Battery DPS systems are designed to be flexible and easy to optimize and adjust. Whether you are designing for the first time or adjusting at a later stage, our systems can be easily adapted to meet your needs and avoid unnecessary waste.

EMC performance

Master Battery DPS systems utilize advanced EMI suppression technology. We ensure that high-current fluctuations do not affect low-current power supplies, and we minimize the current impact of the system by time-starting large loads.

High efficiency

Master Battery DPS specializes in efficient power supply. By minimizing line losses and ensuring a tight connection between the power supply and the load, we ensure high output voltage stability and overall system efficiency.

Peaking performance

Compared to other DPS systems, Master Battery DPS meets the peaking needs of the grid even better. Fast start/stop and simple operation, it also supports full automation for your operation.

Model	PS310DC	PS510DC
Power	3000~10000	
Input/Output	Two 220VAC input, One 240VDC output, One 220Vac output	

Input

Input Voltage	220VAC Single phase
Voltage Range	176~300VAC
Frequency Range	40~70 Hz
Power Factor	$\cong 0.99$

Output

Output Current	10~35A
Rated Output Voltage	240VDC Single Circuit
Output Voltage Range	204~288VDC
Current Adjustable Range	10%~110% infinitely adjustable
Voltage Accuracy	$\pm 0.5\%$
Peak-peak Noise Voltage	$\cong 2\%$
Loading Effect	$\cong 2\%$
Efficiency	$\cong 94\%$
Current Balance	$\cong \pm 3\%$
Battery Charge Current	0.2C (Typical)

Battery

Battery Type	230V 15AH(2U)	230V 27AH (4U)
Charging Current	3A \pm 10%	6A \pm 10%
Charging Time	5h	

General Parameters

Cabinet W*d*h	440*800*133(3U)mm	440*800*222(5U)mm
Cabinet	20kg	25kg
Module	33-60kg	
Storage and Transportation Temperature	-25~55°C	
Operating Temperature	0~45°C	
Working Humidity	<95 % without condensation	
Working Altitude	<2000m	
Work Noise	< 55dB @ 1 m	

AC Online PS Series

PS406AC & PS610AC



PS406AC

PS610AC

💡 Highly compatible

Master Battery DPS is designed with the diverse needs of today's power grids and data centers in mind. Considering that the majority of equipment operates on AC power, our AC On-Line DPS connects directly to standard AC power sources, ensuring seamless compatibility with all types of equipment.

💡 Wide range of application scenarios

From large data centers to complex enterprise environments, Master Battery DPS can provide you with a stable power solution. Whatever your needs, our DPS products can fulfill them, providing continuous power to many types of equipment and applications.

💡 Reliability

You can rely on the Master Battery DPS to provide you with continuous power in the event of grid problems or instability. With switching speeds as fast as milliseconds, it ensures that connected equipment remains operational in the event of a power interruption, reducing downtime and potential losses.

💡 Stable power supply

Master Battery DPS features advanced power conditioning technology that continuously adjusts its output to ensure a stable, high-quality power supply for connected equipment at all times.

Model	PS406AC	PS610AC
Power	6kVA/6kw	10kVA/10kw

Input

Input Voltage	220VAC	
Voltage Range	120~280Vac @ (0~50%)Load 160~280Vac @ (50~75%)Load 176~280Vac @(75~100%)Load	
Frequency Range	46Hz ~ 54 Hz @ 50Hz System 56Hz ~ 64 Hz @ 60Hz System	
Power Factor	≥ 0.99	

Output

Output Voltage	208/220/230/240VAC	
Voltage Accuracy	± 1%	
Frequency Range (Synchronization Range)	46Hz ~ 54 Hz @ 50Hz System 56Hz ~ 64 Hz @ 60Hz System	
Frequency Range (Battery Mode)	50 Hz ± 0.1 Hz Or 60Hz ± 0.1 Hz	
Power Factor	≥0.9	
Peak Factor	3:1 max	
Harmonic Distortion	≤ 1% @ 100% linear load; ≤ 4 % @ 100% non-linear loads	
Switching Time	AC to Battery	0 ms
	Invert to Bypass	0 ms
Input/output Forms	1 input & 2 outputs or 2 inputs & 2 outputs	

Power

AC Mode	> 95%
Battery Mode	> 93%

Battery

Battery Type	230V lithium battery	
Battery Capacity	15AH/27AH	
Battery Net Weight	30~60kg	

General

Chassis Dimensions (W*D*H)	440*750*177(4U)mm	440*750*266(6U)mm
Net Weight of Mainframe	34kg	38kg
Storage Temperature	-25~55°C	
Operating Temperature	0~45°C	
Operating Humidity	<95 % without condensation	
Operating Altitude	<2000m	
Operating Noise Level	< 55dB @ 1 m	

AC Mobile ESS (EU)

SILENCE POWER

UE-S215120A & UE-S430240A



💡 High security

Using high-safety lithium iron phosphate batteries, battery pack partition safety isolation, built-in module-level fire protection unit, system-level fire protection unit, active safety early warning system, to ensure safe and reliable operation of the system.

💡 Efficient and balanced BMS technology

Using high-efficiency equalization technology to eliminate series loss, the power consumption of BMS sampling chips is the lowest in the industry and has good consistency, reducing the inconsistency between modules.

💡 Efficient thermal management system

Internally integrates a high-efficiency liquid cooling and liquid heating system. After 240 cells are connected in series.

💡 Highly integrated

The whole machine is highly integrated battery system, PCS energy module, AC contactor switching module, EMS energy management system, which can be directly and quickly installed and deployed by end users.

💡 On-off grid switching

The system supports on-grid and off-grid switching. When the grid is powered off, it can be switched from on-grid to off-grid power supply, and supports off-grid load power supply.

💡 Long life cycle

The cycle times of the battery cell is more than 8000 times, and the laser welding process is adopted to ensure that the service life of the system can reach more than 15 years.

💡 Easy installation

Integrated all-in-one cabinet design, standardized product shipments, building block building of the power station system, extremely simplified product installation, and convenient deployment by users.

💡 Convenient operation and maintenance

With a fully modular design, after-sales personnel only need to simply replace the corresponding modules to complete the after-sales work. From local operation and maintenance to cloud operation and maintenance, operation and maintenance are extremely simplified.

Battery Energy Storage

215kWh

430kWh

Single Cell Type	LFP 3.2V/280AH	
Module Combination	1P30S	
Battery Cluster Combination	8 modules in series	
Battery Cluster Number	1	2
Capacity (kWh)	215	430
Nominal Voltage (V)	768	
Voltage Range (Vdc)	703~852(2.93V~3.55V)	
Discharge Depth	90% DoD	
Service Life	>8000 cycles@80%DoD	
Thermal Management Mode	Air cooling technology	
Thermal runaway management	Aerosol Extinguishing or PFH	

AC Input/Output

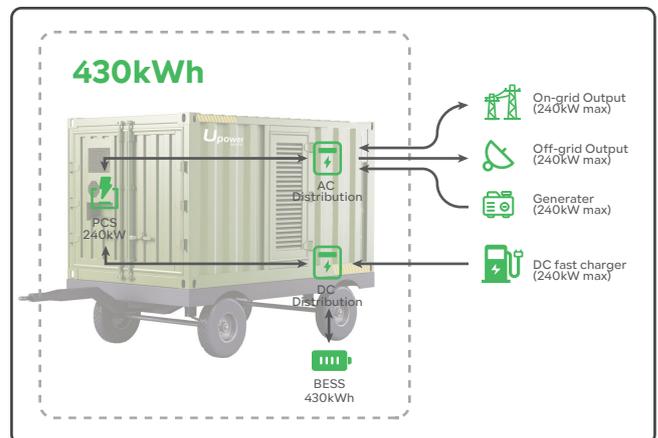
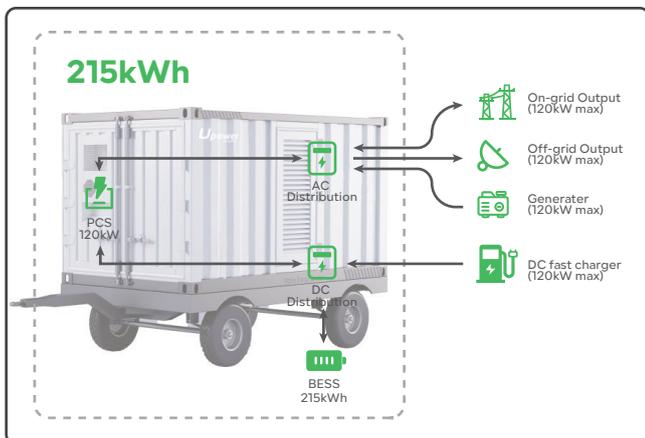
Rated AC output power(kW)	120	240
Max. AC output power(kVA)	120	240
Rated output voltage(Vac)	230/400,3P+N+PE	
Max.current(Aac)	172	344
Rated grid frequency(Hz)	50/60Hz(settable)	
Power factor	0.8cap-0.8ind	
Unbalanced load capacity	100%	
Overload	35 110%@10min,120%@1min	

System Characteristic

PCS Cooling	Forced Air Cooling
PCS Topology	Non-isolation
AC/DC start function	Integration
Switch from Grid-connected to Off-grid	Integration
Communication Interface	Ethernet, RS485, CAN, Bluetooth
Warranty	3 years free, paid from the 4th to the 15th year
Certifications	IEC62619, UN38.3, IEC/EN 62477-1, EN-50549-1,VDE-4105,AS4777,G99

General Parameters

Dimensions (W*D*H)	2560*1050*1600mm / 100*41*63in	2560*1050*1600mm / 100*41*63in
Total Weight	3250kg /7165lb	5310kg/11706lb
Operation Altitude	2000m / 6561ft	
Noise Level @1m	<75 dB(A)	
IP Rating	IP54	
Operating Temperature	-20°C to 55°C	
Operating Humidity (RH)	0 to 95%	
Storage Conditions	-20°C to 30°C, Up to 95% RH, non-condensing, State of Energy (SoE): 50% initial	



Modular UPS UPS Series

UPS240 & UPS300



Smart and Optimized

Adopt smart technologies and optimized design for higher efficiency

Dynamic Hibernation

According to the actual power selection module dynamic hibernation and support rotating hibernation, effectively extend the life of the device

Eco-conscious Solutions

Offer eco-friendly, sustainable technology solutions

Dependable and Resilient

Deliver dependable, resilient products that ensure business continuity

Model	UPS240	UPS300
type/Rated Capacity	240kVA	300kVA
Cabinet Type	7/12 Module Cabinet	
Optional Power Module	20KVA/25kVA	
Optional Capacity	80~240/100~300	
Main Circuit		
PHASE	3 phases + N lines + PE	
Rated Voltage	380/400/415Vac (line voltage)	
Rated Frequency	50/60Hz	
Voltage Range	50/60Hz304Vac ~ 478Vac (line voltage) Full-load; 304Vac ~ 228Vac(line voltage) Load derating linearly from 80% ~100%	
Frequency Range	40Hz~70Hz	
Power Factor	>0.99	
Harmonic Content	THDi<3%(Linear full-load); THDi<5%(Non-linear load)	
Bypass		
Rated Voltage	380/400/415Vac (line voltage)	
Voltage Range	Default to -20%~ +15%; Settable, Upper limit: +10%,+15%,+20%,+25%; Lower limit: -10%,-15%,-20%, -30%,-40%	
Frequency Range	Rated Frequency 50/60Hz; Settable (+1Hz+3Hz+5Hz)110% Longterm operation, >150% Load operation 200ms	
Overload Capacity		
Battery		
Battery Voltage	±240Vdc	
Charging Power	3kW*N(N is the number of power supply module), Optional 50A charging module (occupied power module position)	
Voltage Accuracy	±1%	
Invert Output		
Rated Voltage	380/400/415Vac	
Power Factor	1	
Rated Frequency	50/60Hz	
Voltage Accuracy	±1.0% @ Balanced load; < +5.0% @ Ubalanced load	
Frequency Accuracy	50/60Hz±0.01%	
Frequency Tracking Range	Settable, ±0.5Hz ~ ±5Hz, Default to ±3Hz	
Voltage Waveform Distortion	THDi<2%(100% Linear load), THDis4%(Non-linear load)	
3-Phase Accuracy	120°±1°	
Peak Ratio	3:1	
Inverter Overload Capacity	<105%, Longterm; <110%, 60 minutes; 110 ~ 125%, 10 minutes; >125 ~ 150%, 1minutes; >150%, 200ms	
System		
Efficiency	≥96% @ Dual Switching Mode	
Interface	Touch-screen + LED	
Wiring Method	Top Wiring and Bottom Wiring	
Standards	Safety Standard: IEC62040-1-1; EMC: IEC62040-2; Design & Test: IEC62040-3	
Ingress Protection	IP20	
Accessory	Temperature and humidity sensor, Anti seismic component, Lightning protection component, Dust Net, LBS Cable	
Feeder Protection	Standard: Disconnecter, Optional: Fuse	
Communication	RS232/RS485/Modbus/SNMP (Optional)/Editable Dry Contact	
Operating Environment	Operating Temperature: 0~40°C; Relative humidity: 0~95% (No condensing)	
Noise	< 60dB @ 1M	
Elevation	No derating on1000M, >1000M,Power derating by 1% every 100M rise	
Dimensions		
Cabinet (W*D*H)	600*1010*2000mm	
Module (W*D*H)	440*690*86(2U)mm	
Weight		
Cabinet	270kg	
Module	25kg	

Moduler UPS UPS Series

UPS480 & UPS600 & UPS720



UPS+Battery



Smart and Optimized

Adopt smart technologies and optimized design for higher efficiency

Dynamic Hibernation

According to the actual power selection module dynamic hibernation and support rotating hibernation, effectively extend the life of the device

Eco-conscious Solutions

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Deliver dependable, resilient products that ensure business continuity

Model	UPS480	UPS600	UPS720
Rated Capacity	480kVA	600kVA	720kVA
Power module Capacity	40kVA	50kVA	60kVA

Main Input

PHASE	3 phases + N lines + PE		
Rated Voltage	380/400/415Vac (line voltage)		
Rated Frequency	50/60Hz		
Voltage Range	304Vac ~ 478Vac (line voltage) Full-load; 304Vac ~ 228Vac(line voltage) Load derating linearly from 80% ~100%>0.99		
Frequency Range	40Hz~ 70Hz		
Power Factor	>0.99		
Current Harmonic Components	THDi<3%(Linear full-load); THDi<5%(Non-linear load)		

Bypass

Rated Voltage	380/400/415Vac (line voltage)		
Voltage Range	Default to -20%~ +15%; Settable, Upper limit: +10%,+15%,+20%,+25%; Lower limit: -10%,-15%,-20%, -30%,-40%		
Frequency Range	Settable ($\pm 1\text{Hz}, \pm 3\text{Hz}, \pm 5\text{Hz}$)		
Overload Capacity	110% Longterm operation, >150% Load operation 200ms		

Battery

Voltage	$\pm 192\text{Vdc}$ (384 ~ 528Vdc)		
Charging Power	15%* power supply module		
Voltage Accuracy	$\pm 1\%$		

Invert Output

Rated Voltage	380/400/415Vac(line power)		
Power Factor	1	1	0.9
Rated Frequency	50/60Hz		
Voltage Accuracy	$\leq \pm 1.0\%$ @ Balanced load; $< \pm 5.0\%$ @ Ubalanced load		
Frequency Accuracy	50/60Hz $\pm 0.01\%$		
Frequency Tracking Range	Settable, $\pm 0.5\text{Hz} \sim \pm 5\text{Hz}$, Default to $\pm 3\text{Hz}$		
Voltage Waveform Distortion	THDi $\leq 2\%$ (100% Linear load), THDu $\leq 4\%$ (Non-linear load)		
3-Phase Accuracy	$120^\circ \pm 1^\circ$		
Ratio of Peak	3:1		
Inverter Overload Capacity	<105%, Longterm; <110%, 60 minutes; 110 ~ 125%, 10 minutes; >125 ~ 150%, 1minutes; >150%, 200ms		

System

Efficiency	$\geq 96\%$ @ Dual Switching Mode		
Interface	Touch-screen + LED		
Wiring Method	Top Wiring and Bottom Wiring		
Standards	Safety Standard: IEC62040-1-1; EMC: IEC62040-2; Design & Test: IEC62040-3		
Ingress Protection	IP20		
Accessory	Temperature and humidity sensor, Anti seismic component, Lightning protection component, Dust Net, LBS Cable		
Feeder Protection	Standard: Disconnecter, Optional: Fuse		
Communication	RS232/RS485/Modbus/SNMP (Optional)/Editable Dry Contact		
Operating Environment	Operating Temperature: 0~40°C; Relative humidity: 0~95% (No condensing)		
Noise	< 60dB @ 1M		
Elevation	No derating on1000M, >1000M,Power derating by 1% every 100M rise		

Dimensions

Cabinet (W*D*H)	1000*1100*2000mm	1000*1100*2000mm	1000*1100*2000mm
Module (W*D*H)	440*720*130 (3U)mm		

Weight

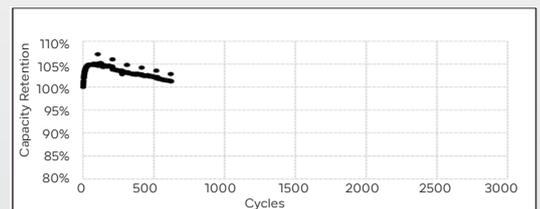
Cabinet	490kg	500kg	530kg
Module	34kg	36kg	38kg

Lithium Battery Cabinet UE-HP Series

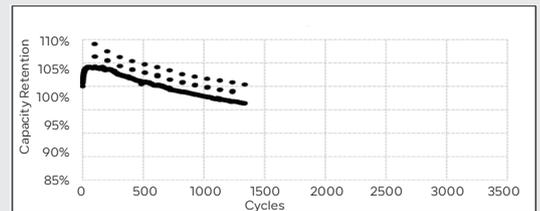
UE-512Li50HP & UE-512Li100HP



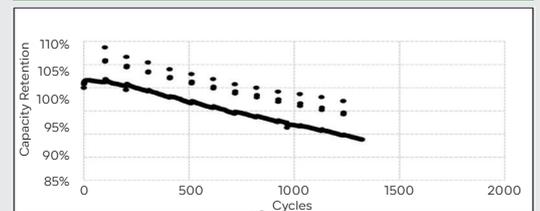
25°C 1C/1C Cycle



25°C 1C/3C Cycle



25°C 1C/6C Cycle



High Reliability:

- Long cycle life, reaching up to 6,000 cycles.
- Highly stable lithium iron phosphate cells, no fire even with thermal runaway.
- Three-layer BMS (Battery Management System), ensuring layer by layer reliability of the lithium battery.
- PACK level fire extinguisher + optional cabinet level fire extinguisher, precise and fast fire extinguishing without spreading

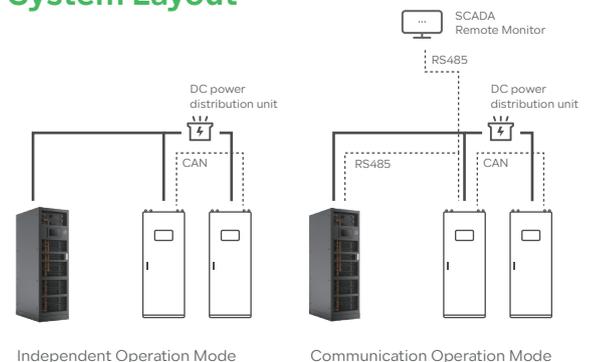
High Efficiency:

- High energy density, saving 50% space compared to lead-acid batteries.
- Intelligent battery management system, saving 80% of daily maintenance costs.

Flexibility:

- Supports continuous 4C discharge, meeting the optimal current requirements of data centers.
- Compatible with dual/three-Bus outputs, meeting the needs of all mainstream dual-Bus and three-Bus UPS configurations.

System Layout



Independent Operation Mode

Communication Operation Mode

Product Model

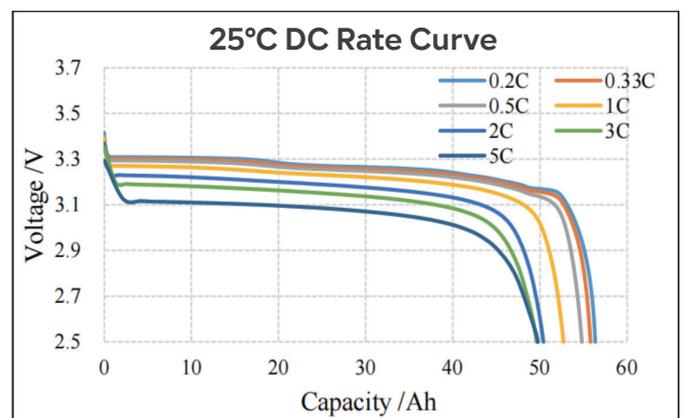
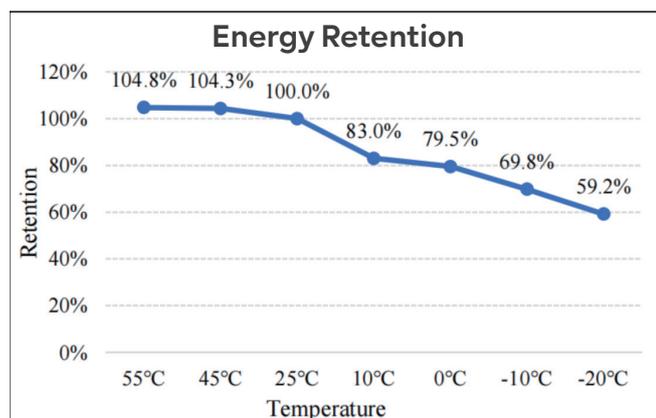
UE-512Li50HP

UE-512Li100HP

Nominal Voltage	512V(1P160S)	
Nominal Capacity	53AH	106AH
Rated Charging Voltage	3.4*160=544V	
Cell Type	3.2V 53AH	
Cell Material	LFP	
Cell Connection Mode	1P160S	2P160S
Standard Charging Current	0.2C	
Maximum Continuous Charging Current	1C	
Standard Discharge Current	1C	1C
Maximum Continuous Discharge Current	4C	4C
Cycle Life	> 6000@80%DOD(@0.5C Charging 1C Discharging 25°C)	
Protection Function	Over charge protection, over discharge protection, short circuit protection, temperature protection, charge over current protection and discharge over current protection, etc	

Environmental Specification

Operating Temperature	charge: 0-45°C discharge: -20-50°C (Recommend temperature 20~25°C)	
Storage Temperature	-20-60°C	
Relative Humidity	5%-95%	
Altitude	0-2000 meter	
Cooling Mode	Fan cooling	
Ingress Protection	IP20	
Dimension (W*D*H)	600*1000*2200mm	
Weight	600kg	800kg



Rack-mount UPS UPS Series

UPS201-R & UPS202-R & UPS203-R & UPS206-R

UPS+ Battery



Compact Lithium-Ion Battery Pack

The use of advanced lithium-ion batteries allows for a more compact design, significantly reducing space requirements by at least half compared to traditional VRLA batteries.

Extended Battery Lifespan

These lithium-ion batteries offer a lifespan that is three times longer than VRLA batteries, providing a durable and long-lasting power solution.

Modular Design for Easy Expansion

The RL series is engineered with modularity in mind, enabling straightforward scalability. Users can easily extend backup time by adding more battery packs as their power needs grow.

Rack/Tower Convertible Configuration

This series offers the flexibility to be installed either as a rack-mounted unit or as a standalone tower, catering to a variety of installation environments.

Built-in Battery Management System (BMS)

The inclusion of a BMS communication port ensures efficient management of the battery pack, maintaining optimal performance and safety.

Enhanced Installation Flexibility

The dual-format design of the RL series not only saves space but also offers diverse installation options, making it adaptable to different operational contexts.

Model	UPS201-R	UPS202-R	UPS203-R	UPS206-R
Capacity	1000VA/900W	2000VA/1800W	3000VA/2700W	6000VA/6000W

Input

Nominal Voltage	230VAC			
Voltage Range	160 VAC - 300 VAC @100% load, 110 VAC @ 60% load (Derating)			176VAC 300 VAC @100% load, 110 VAC @ 60% load (Derating)
Frequency Range	40Hz - 70Hz			
Power Factor	> 0.99 @ nominal voltage (100% load)			
Input Connection	IEC 320 C14	IEC 320 C20	IEC 320 C20	Terminal

Output

Output Voltage	220/230/240VAC(Selectable)			
AC Voltage Regulation (Batt. Mode)	±1%			
Frequency Range (Synchronized Range)	57~63Hz or 47~53Hz			56~64Hz or 46~54Hz
Frequency Range (Batt. Mode)	50Hz /60Hz ± 0.1Hz			
Charging Current	5A	10A	10A(if O/P load>95%, CHG current derate to 6A)	10A, 20A, 30A (20A default!)
Output Connection	(6) IEC 320 C13	(6) IEC 320 C13	(6) IEC 320 C13 +(1) IEC C19	Terminal
Current Crest Ratio	3:1			
Harmonic Distortion	≤3 % THD (Linear Load) ≤6 % THD (Non-linear Load)		\leq 1% THD (Linear Load) \leq 4% THD (Non-linear Load)	
Transfer Time	AC to Battery	Zero		
	Inverter to Bypass	4 ms (Typical)		Zero
Waveform (Batt. Mode)	Pure Sinewave			
Overload	Line Mode	<35°C 105-125% 2min ; 125-140% 30sec ;		100~105%, Continue 105-125% 10min ; 125-150% 1min ; >150% immediately
	AC Mode	<35°C 105-120% 1min ; >120% immediately		100-110% 30sec ; 110-130% 10sec ; >130% immediately

EFFICIENCY

AC Mode	90%	94%
Battery Mode	85%	90%

PHYSICAL

Dimension (W*D*H)	438*450*86mm	438*500*86mm	438*500*86mm	438*515*86mm
Net Weight	8kg	8.8kg	9.7kg	19.7kg

EFFICIENCY

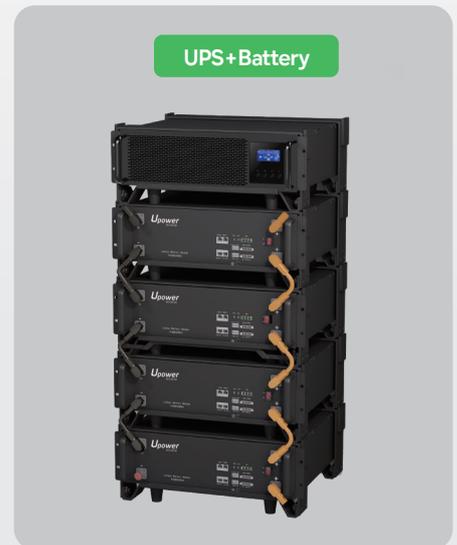
Operation Humidity	0-95 % RH @ 0- 40°C (non-condensing)		
Noise Level	Less than 50dB @ 1 Meter		Less than 55dB @ 1 Meter

MANAGEMENT

Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8, Linux and MAC		
Optional SNMP	Power management from SNMP manager and web browser		

Rack-mount UPS UPS Series

UPS303-R & UPS305-R & UPS306-R



Operational Flexibility Without Batteries

The RL series can function without being connected to batteries, providing flexibility and convenience in various operational scenarios.

High Input and Output Power Factors

It features an input power factor correction of 0.99 and an output power factor of 1.0, ensuring efficient power usage and delivering full power capacity.

Optimized Efficiency and Voltage Range

The efficiency of the RL series reaches up to 93.5%. It is also equipped with a selectable input voltage range, making it suitable for household appliances and personal computers.

Enhanced Protection and Compatibility

This series includes overload and short circuit protection, ensuring the safety of connected devices. It operates on a 48V DC system and is compatible with utility power and generator sources.

Advanced Restart and Scalability Features

The RL series automatically restarts upon AC recovery, ensuring uninterrupted operation. It also allows for parallel connection of up to nine units, enhancing capacity and redundancy.

Intelligent Charging and Cold Start Capabilities

It is designed with a 50A smart battery charger to optimize battery performance. Additionally, the cold start function enables the UPS to be powered on even without AC power, ensuring readiness in various situations.

Model	UPS303-R	UPS305-R	UPS306-R
Power	3000VA/3000W	5000VA/5000W	6000VA/5100W

Input

Rated Voltage	220/230/240VAC
Voltage Range	110-280 VAC (50%load) ; 176-280 VAC (100%load)
Frequency Range	46 ~ 54 Hz or 56 ~ 64HZ
Power Factor	> 0.98 @ Rated voltage (100% load)
THDi	<8%

Output

Rated Voltage	220/230/240VAC
Regulation Accuracy (Battery Mode)	±1%
Frequency Range: Synchronization Range	46 ~ 54 Hz or 56 ~ 64Hz
Frequency Range: Battery Mode	50 Hz+0.1 Hz or 60 Hz+0.1 Hz
THD	<3%THD (Linear load) ; < 5%THD (Nonlinear load)
Switch Time: Grid To Battery	0ms
Switch Time: Inverter To Bypass	4 ms (Typical value)
Waveform	Pure sine wave

Efficiency

AC Mode	93%
ECO Mode	98%
Battery Mode	93%

Battery

Battery Voltage	48VDC
Float Voltage	54VDC
Charge Current (Max)	60A

Physical Property

Dimensions (W*D*H)	438*420*132.5mm
Net Weight	15kg

Use Environment

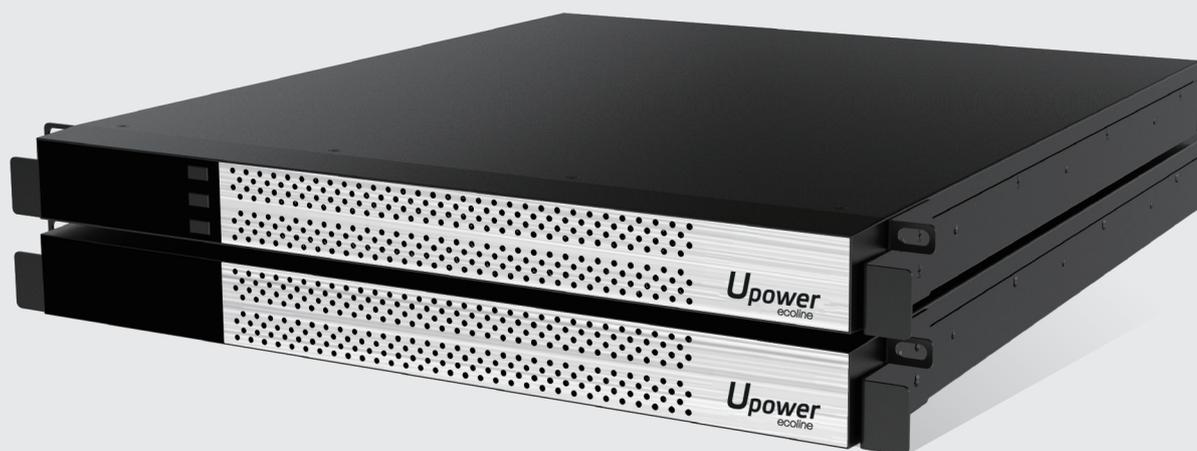
Temperature and Humidity	0° C~50° C operating temperature; -15° C~60° C storage temperature; 0~95% Relative humidity Relative humidity (non-condensing)
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Control management

Communication Interface	RS23, USB
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Rack-mount UPS UPS Series

UPS106-RH



💡 High Efficiency and Performance

Boasts an impressive efficiency of up to 94%, ensuring minimal energy loss. It also offers a strong overload capability, making it reliable under various conditions.

💡 Advanced Protection Features

Equipped with built-in back-feed relay and OVCD (Over Voltage Cut-off Device) protection, enhancing safety and durability.

💡 Flexible Power Management

Features a large charger up to 8A for long-run models, and an output power factor of 1, ensuring efficient power delivery. Additionally, it supports a wide input voltage range from 110 to 300 VAC, making it versatile for different power conditions.

💡 Smart Energy Saving and Compatibility

Includes an ECO mode for energy saving and is compatible with generators. It also supports SNMP/USB/RS-232 communications for easy integration with existing systems.

💡 User-Friendly Interface and Options

Offers an optional 2.8" color touched LCD for easy monitoring and control, and adjustable battery numbers for customized usage. Furthermore, it's optionally compatible with Lithium batteries (192-240VDC), providing flexibility in battery choice.

💡 Enhanced Functionality

Features active input power factor correction of 0.99, a 50Hz/60Hz frequency converter mode, and an Emergency Power Off (EPO) function, adding to its robustness and utility in various scenarios.

Model		UPS106-RH
Phase	Single phase (L+N+PE)	
Capacity	6000 VA / 4800 W	
Input		
Nominal Voltage	208*/220/230/240VAC	
Voltage Range	110-300VAC \pm 3% at 50% load; 176-300VAC \pm 3% at 100% load	
Frequency Range	46~54Hz / 56~64 Hz	
Power Factor	\cong 0.99 @ nominal voltage (100% load)	
THDi	\cong 6 % @ 100% load	
Output		
Output Voltage	208*/220/230/240VAC	
AC Voltage Regulation (Batt. Mode)	\pm 1%	
Frequency Range (Synchronized Range)	46~ 54 Hz or 56 ~ 64 Hz	
Frequency Range (Batt. Mode)	50 Hz or 60Hz \pm 0.1 Hz	
Current Crest Ratio	3:1(max.)	
Harmonic Distortion	\cong 2 % THD (Linear Load) / 4 % THD (Non-linear Load)	
Transfer Time	AC to Battery	Zero
	Inverter to Bypass	\cong 4 ms (Typical)
Waveform (Batt. Mode)	Pure Sinewave	
Overload	AC Mode	100% \cong load \cong 105% Warning only; 105%< load \cong 125% 1min; >125%: 1 sec
	Battery Mode	100% \cong load \cong 105% Warning only; 105%< load \cong 125% 30 sec; >125%: 1 sec
Efficiency		
AC Mode	96%(max.)	
Battery Mode	93%(max.)	
Battery		
Nominal Voltage	192 VDC	
Charging Current	6.0 A (max.)	
Charging Voltage	218.4VDC \pm 1%	
Battery Connector	2 Poles (50A max.)	
Lithium Battery Pack		
Model Name	LIO 192003	
Capacity	3 Ah	
Nominal DC Voltage	192 VDC	
Cell Type and nominal capacity	LiFeO4 and 3.2V/3Ah	
Continuous discharge current	30A max.	
Battery Connector	2 Poles (50A max.)	
Com ports	RS485 (Pack to UPS), CAN (pack to pack)	
Capacity extension	YES, max up to 5 packs	
Unit Dimension(W*D*H)	438*550*44mm	
Indicators & Com		
LCD	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators	
Communication ports	USB, Mini Slot	
Emergency Power Off (EPO)	YES	
Physical		
Unit Dimension (W*D*H)	438*550*44mm	
Net Weight	12.5kg	
Package Dimension (W*D*H)	550*650*100mm	
Gross Weight	14.3kg	
Environment		
Humidity	0-95 % RH @ 0- 40°C (non-condensing)	
Altitude	0~2000meters without derating; 2000~3000 meters, derating 1% every 100meters; >3000 meters, not working	
Noise Level	Less than 55dBA @ 1 Meter	
Management		
USB	Supports Windows 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC	
Optional SNMP	Power management from SNMP manager and web browser	
Optional WiFi module	App for Wifi linking	

Rack-mount UPS UPS Series

UPS206-RH & UPS210-RH

UPS+Battery



Efficient Power Management

This product boasts a high efficiency of up to 94%, active input power factor correction of 0.99, and an output power factor of 1, ensuring optimal power usage and conversion.

Enhanced Safety Features

It includes built-in Over Voltage Cut-Off (OVCD) protection and a back-feed relay, enhancing the safety and reliability of the device.

Versatile Charging Options

The product offers a large charger up to 8A for longrun models and is optionally compatible with Lithium batteries (192-240VDC), providing flexible charging solutions.

Advanced Operational Modes

It features a 50Hz/60Hz frequency converter mode, ECO mode for energy saving, and an Emergency Power Off (EPO) function, catering to various operational needs.

Broad Compatibility

The device is generator compatible, offers a wide input voltage range (110-300 VAC), and supports SNMP/USB/RS-232 communications, ensuring it can be integrated into various setups.

User-Friendly Interface

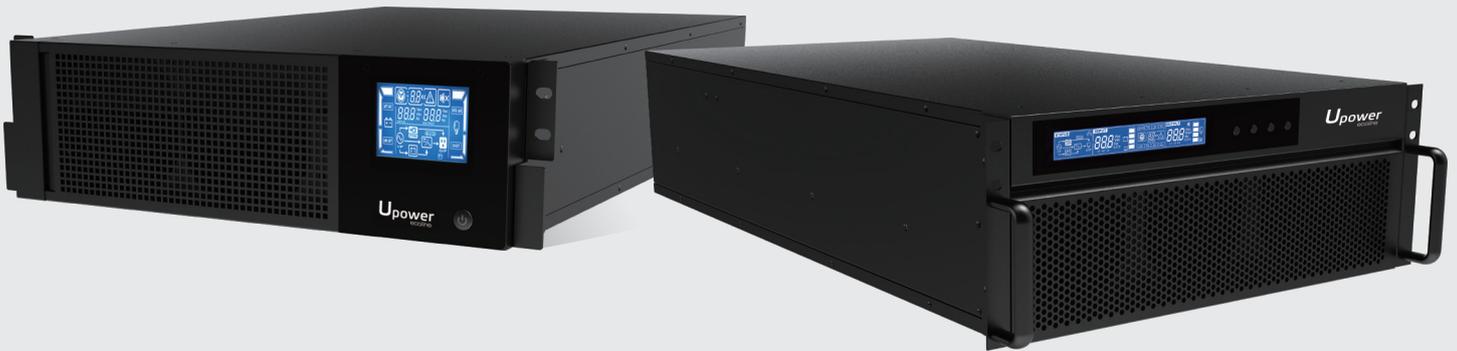
An optional 2.8" color touch LCD enhances user experience, and the adjustable battery numbers offer additional customization for specific power needs.

Model	UPS206-RH	UPS210-RH
Phase	1 phase in / 1 phase out	
Capacity	6000 VA / 6000 W	10000 VA / 10000 W
Input		
Nominal Voltage	208/220/230/240 VAC	
Voltage Range	110~300VAC \pm 3 % at 50% load 176~300VAC \pm 3 % at 100% load	
Frequency Range	46~54 Hz or 56~64 Hz 40 ~ 70 Hz (In generator mode)	
Power Factor	\cong 0.99 @ full load	
THDi	< 4% @100% Load ; < 6% @50% Load	
Output		
Output Voltage	208*/220/230/240 VAC	
AC Voltage Regulation (Batt. Mode)	\pm 1%	
Frequency Range (Synchronized Range)	46~54 Hz or 56~64 Hz	
Frequency Range (Batt. Mode)	50 Hz \pm 0.1 Hz or 60 Hz \pm 0.1 Hz	
Current Crest Ratio	3:1 (max.)	
Harmonic Distortion	\cong 1 % THD (Linear Load) ; \cong 4 % THD (Non-linear Load)	
Transfer Time	AC to Battery	Zero
	Inverter to Bypass	Zero
Waveform (Batt. Mode)	Pure Sinewave	
Overload	AC Mode	100-105% Continue, 105-125% for 10 min, 125%~150% 0.5min, >150% immediately
	Battery Mode	100-110% 3min, 110-130% for 0.5 min, >130% immediately
Efficiency		
AC Mode	94%	
Battery Mode	92%	
Battery		
Long-run Model	Battery Type	UE-HP Series Lithium battery
	Charging Current	1A/2A/4A/6A/8A
	Charging Voltage	192VDC
Physical		
Dimension(W*D*H)	438*515*88mm	
Net Weight	11kg	12.1kg
Environment		
Operating Humidity	20-95 % RH @ 0- 40°C (Non-condensing)	
Noise Level	Less than 55dB @1Meter	Less than 58dB @1Meter
Management		
Smart RS-232/USB	Supports Windows® Family, Linux and MAC	
Optional SNMP	Power management from SNMP manager and web browser	

Rack-mount UPS UPS Series

UPS315-RH & UPS320-RH & UPS330-RH & UPS340-RH & UPS460-RH

UPS+ Battery



High safety

Adoption of high security, long life, excellent performance LiFePO4 battery; module built-in fire fighting device, accurate and rapid fire extinguishing, the smallest unit to control the non-proliferation;

High performance

Support 2 systems in series to form $\pm 192V$ (384V) system, unique working strategy to solve the positive and negative half-week power inconsistency caused by unbalanced problems support high rate of continuous discharge to meet the demand for power backup 15 minutes.

Long life

Cycle life of more than 6000 times, the design of the calendar life of more than 10 years: in line with the ISO26262 standard multi-level functional safety protection control BMS, to ensure safe and reliable operation.

Functionality

Isolated RS485, CAN communication, stable communication; modular rack design, faster installation, more flexible deployment. Private cloud platform unification, can realize remote monitoring and intelligent diagnosis, saving more than 80% of daily maintenance cost.

Model	UPS315-RH	UPS320-RH	UPS330-RH	UPS340-RH	UPS460-RH
Phase	3-phase in / 3-phase out				
Capacity	15KVA/15KW	20KVA/20KW	30KVA/30KW	40KVA/40KW	60KVA/60KW
Parallel Capability	4				

Input

Nominal Voltage	3 x 400 VAC (3Ph+N) or 208*/220/230/240 VAC (Ph-N)				
Voltage Range	190-520 VAC (3-phase) @ 50% load ; 305-478 VAC (3-phase) @ 100% load				
Frequency	46~54 Hz or 56~64Hz				
Power Factor	≤0.99 @ 100% load				

Output

Output Voltage	3 x 360*/380/400/415 VAC (3Ph+N) or 208*/220/230/240 VAC (Ph-N)		3 x 360*/380/400/415 VAC (3Ph+N)		
AC Voltage Regulation (Batt. Mode)	± 1%				
Frequency Range (Synchronized Range)	46~54Hz or 56~64Hz				
Frequency Range (Batt. Mode)	50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz				
Current Crest Ratio	3:1 (max.)				
Harmonic Distortion	≅ 2 % THD (Linear Load) ; ≅ 5 % THD (Non-linear Load)				
Transfer Time	Zero				
Waveform (Batt. Mode)	Pure Sinewave				
Overload	AC Mode	100-110% for 60 min, 110-125% for 10 min, 125%~150% 1min, >150% immediately			
	Battery Mode	100-110% for 60 min, 110-125% for 10 min, 125%~150% 1min, >150% immediately			

Efficiency

AC Mode	95.5%
ECO Mode	98.5%
Battery Mode	94.5%

Battery

Battery Type	UE-HP Series Lithium battery				
Charging Current (max.)	1A~12A(Adjustable)		1A~16A(Adjustable) 1A~18A(Adjustable)		
Charging Voltage	± 192 VDC				

Physical

Dimension (W*D*H)	438*680*133 [3U]mm			438*797*176[4U]mm	
Net Weight	30kg	30kg	32kg	34kg	45kg

Environment

Operating Temperature	0-40°C				
Operating Humidity	< 95 % and non-condensing				
Noise Level	Less than 65dB @ 1 Meter			Less than 70dB @ 1 Meter	

Management

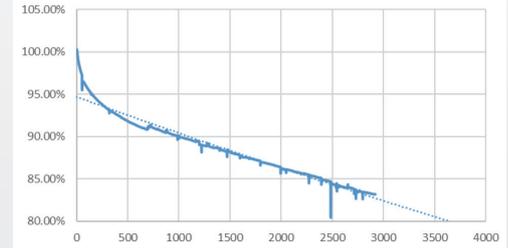
Smart RS-232/USB	Supports Windows® family, Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				

*When output voltage is set as 3 x 360VAC or 208 VAC, the output power of the unit will be de-rated to 90%.
Product specifications are subject to change without further notice."

Rack-mount UPS UE-HP Series

UE-192Li50P & UE-192Li100HP

Cycle life curve



Standby time

放电功率	备用时间			
	192V 50Ah	192V 100Ah	384V±192V 50Ah	384V±192V 100Ah
10kW	≥55min	≥110min	≥110min	≥220min
15kW	≥36min	≥72min	≥72min	≥144min
20kW	≥27min	≥54min	≥54min	≥108min
30kW	≥18min	≥36min	≥36min	≥72min
40kW	-	≥25min	≥25min	≥50min
50kW	-	≥20min	≥20min	≥40min
60kW	-	≥18min	≥18min	≥36min
70kW	-	≥15min	≥15min	≥30min
80kW	-	-	-	≥27min
100kW	-	-	-	≥21min
120kW	-	-	-	≥18min
140kW	-	-	-	≥15min



High safety

Adoption of high security, long life, excellent performance LiFePO4 battery; module built-in fire fighting device, accurate and rapid fire extinguishing, the smallest unit to control the non-proliferation;

Long life

Cycle life of more than 6000 times, the design of the calendar life of more than 10 years: in line with the ISO26262 standard multi-level functional safety protection control BMS, to ensure safe and reliable operation.

High performance

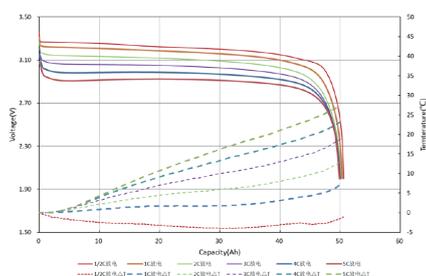
Support 2 systems in series to form ± 192V (384V) system, unique working strategy to solve the positive and negative half-week power inconsistency caused by unbalanced problems support high rate of continuous discharge to meet the demand for power backup 15 minutes.

Functionality

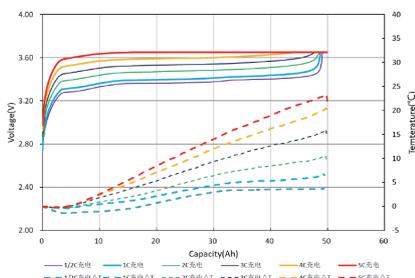
Isolated RS485, CAN communication, stable communication; modular rack design, faster installation, more flexible deployment. Private cloud platform unification, can realize remote monitoring and intelligent diagnosis, saving more than 80% of daily maintenance cost.

Model		UE-192Li50HP	UE-192Li100HP
Combination Of Battery Cells		1P60S	2P60S
Material		LiFePO4	
Nominal Voltage		192V	
Nominal Capacity		50Ah	
Nominal Energy		9.6KWh	
Voltage	Recommended Charging Voltage	216V	
	Maximum Charging Voltage	219V	
	Discharge cut-off voltage	162V	
Current	Maximum Charging Current	50A	100A
	Maximum Discharge Current	200A	400A
Charging Overcurrent Protection	Class 1	55A 10S	120A 10S
	Grade 2	60A 1S	150A 1S
Discharge Overcurrent Protection	Class 1	220A 30S	450A 30S
	Grade 2	250A 1S	500A 1S
Weight	Master box	Approx. 48kg	Approx. 85kg
	Slave 1	Approx. 46kg	Approx. 83kg
	Slave 2	-	Approx. 83kg
Dimension	Master Box	W440mm*D670mm*H155mm	W440mm*D670mm*H155mm
	Slave 1	W440mm*D670mm*H155mm	W440mm*D670mm*H155mm
	Slave 2		W440mm*D670mm*H155mm
Communication Type		RS485\CAN	
Cycle Life		≥6000 times	
Design Calendar Life		≥10 years	
Protection Function		Over-charging, over-discharging, charging over-current, discharging over-current, high temperature, low temperature, short circuit, etc.	
Outlet Method		Rear exit line	
Charging Temperature Range		0°C ~ 55°C	
Discharge Temperature Range		-20°C ~ 55°C	
Optimum Operating Temperature Full Park		15°C ~ 35°C	
Storage Temperature (Non-condensing)		-10°C ~ 45°C (within one month) -10°C ~ 35°C (1~3 months) -10°C ~ 25°C) more than 3 months	
Transportation Temperature		Temperature -40°C ~ 45°C ; SOC 40%~60	
Operating Humidity		10%RH ~ 90%RH	
Operating Altitude		0 ~ 2000m	

High and low temperature discharge curve



Charging curve of different multiplication rate



Different rate discharge curve

