



Sinexcel UPS Solutions

Reliable is essential

Energy saving is the breakthrough upgrading application

Sinexcel Electric Co., Ltd

Company Profile

Sinexcel Electric devotes to Low Voltage Power Quality Solutions, uninterruptible power supply together with other PQ products & solutions, independent design, development, production, marketing and sales network covering more than 50 countries to provide our customer with a full range of power quality protection.

300693

Public listed enterprise Stock code 300693

13

13 years industry leader of power quality

50

Biggest inverter-based power quality manufacturer,
reference covering more than 50 countries

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Modular UPS

Power Range: 40~600kVA

High reliability

- Wide input voltage 138~485VAC allows UPS to work in harsh electrical environments to minimize battery use
- Dual control card and dual auxiliary power supply ensure continuous system operation and avoid single failure point
- Power module auto-offline function to avoid downtime caused by single power module failure
- Joint power mode to support inverter obtains power from mains input and batteries

High performance

- Super Eco mode, 99% efficiency + 2ms switching time
- High power module efficiency up to 97.5% and online dual operation efficiency up to 97% for significant energy cost savings
- High input power factor up to 0.99

High power density

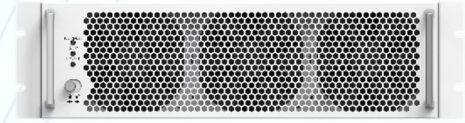
- 50kVA power module in 3U height, easy for capacity expansion

Fully modularized design

- Hot-swappable modular design, easy to replace the power module, reduce the mean time to repair (MTTR) close to zero without no downtime

Flexible energy storage configuration

- Compatible with battery and super capacitor
- The number of batteries can be selected from 30 to 50



50kVA power module in 3U



Sinexcel modular UPS 300kVA



Sinexcel modular UPS 600kVA

Specifications

MODEL		UPS 100	UPS 300	UPS 600
Rated capacity(kVA)		40~100	150~300	350~600
INPUT	Input Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415Vac		
	Voltage Range	138~485V (linear derating between 138~305V)		
	Frequency Range	40~70Hz		
	Input Power Factor	0.99		
	Harmonic Distortion (THDi)	≤3% (100% linear load)		
Bypass input	Bypass Rated Voltage	380/400/415Vac		
	Bypass Frequency	50/60Hz, depend on the load		
Battery	Rated Voltage	360~600Vdc (The number of batteries can be selected from 30 to 50; 40 batteries in default)		
OUTPUT	Output Voltage	380/400/415Vac		
	Voltage Regulation	±1%		
	Waveform	Sine wave		
	Crest Factor	3:1		
	Output frequency	Tracking the bypass input (Bypass mode); 50/60±0.5Hz (Battery mode)		
	Response Time	Online Mode response continuously; switching time of Super Eco Mode ≤5ms, typical 2ms		
	Inverter Overload Capacity	110% overload for 60min 125% overload for 10min 150% overload for 1min		
	Harmonic Distortion (THDv)	≤1% (linear load) ≤3% (non linear load)		
SYSTEM	Output Power Factor	1		
	Efficiency	Super Eco Mode efficiency > 99%; Online Mode: Power module efficiency >97.5%, System efficiency > 97%		
	Bypass Overload Capacity	135% overload long time 150% to 200% overload for 5min 200% to 1000% overload for 1min >1000% overload 100ms		
	Communication	RS485, CAN, Ethernet, SNMP (optional), backfeed protection card (optional), WIFI (optional), 4G (optional), dry contacts (optional)		
Environment	Operating Temperature	-10~40°C		
	Storage Temperature	-40~70°C		
	Relative Humidity	0~95% non condensing		
	Audible Noise	60~75dB		
	Altitude	<1000m (over 1000m, derating rate based on EN/IEC 62040-3, max 4000m)		
Physical	Protection class	IP21 (can be customized)		
	Monitoring	7-inch LCD	12-inch LCD touch screen	
	Dimension (W*D*H, mm)	600×830×1207	600×830×2000	1400×980×2010
	Net weight (kg)	Approx. 280kg	Approx. 500kg	Approx. 1091kg
	Cabinet Color	RAL7035 (can be customized)		
Standards	Certification	TLC, CE (IEC/EN62040-1, IEC/EN62040-2), etc		

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Tower UPS

Power Range: 30~600kVA

Features

Reliable

- Wide input voltage input to minimize battery use
- Redundant auxiliary power supply design enhance system reliability
- High input power factor (>0.99) and low harmonic distortion ($<3\%$)

Intelligent battery management system

- Adjustable charging current and charging voltage, flexible battery configuration
- Compatible with lead-acid battery, lithium battery and super capacitor

Advanced monitoring system

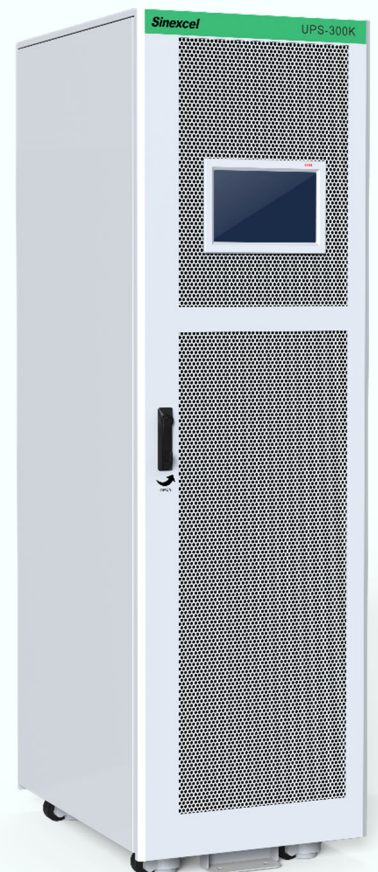
- User-friendly 7-inch and 12-inch LCD touch screen for easy UPS operation
- Monitoring system can record the waveform of power abnormal event to support advanced event analysis
- Recorded data can be exported via USB port

More

- Single UPS capacity up to 600kVA, more space savings compared to traditional UPS system
- Built-in bypass switch
- Optional backfeed protection card and dry contacts
- Battery start (Cold start function)



Sinexcel UPS 100kVA



Sinexcel UPS 300kVA

Specifications

MODEL		UPS 100	UPS 300	UPS 600
Rated capacity(kVA)		30~100	150~300	350~600
INPUT	Input Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415Vac		
	Voltage Range	138~485V (linear derating between 138~305V)		
	Frequency Range	40~70Hz		
	Input Power Factor	0.99		
	Harmonic Distortion (THDi)	≤3% (100% linear load)		
Bypass input	Bypass Rated Voltage	380/400/415Vac		
	Bypass Frequency	50/60Hz, depend on the load		
Battery	Rated Voltage	360~600Vdc (The number of batteries can be selected from 30 to 50; 40 batteries in default)		
OUTPUT	Output Voltage	380/400/415Vac		
	Voltage Regulation	±1%		
	Waveform	Sine wave		
	Crest Factor	3:1		
	Output frequency	Tracking the bypass input (Bypass mode); 50/60±0.5Hz (Battery mode)		
	Response Time	Online Mode response continuously; switching time of Eco Mode ≤5ms, typical 2ms		
	Inverter Overload Capacity	110% overload for 60min 125% overload for 10min 150% overload for 1min		
	Harmonic Distortion (THDv)	≤1% (linear load) ≤3% (non linear load)		
SYSTEM	Output Power Factor	1		
	Efficiency	Super Eco Mode efficiency > 99%; Online Mode: System efficiency > 97%		
	Bypass Overload Capacity	135% overload long time 150% to 200% overload for 5min 200% to 1000% overload for 1min >1000% overload 100ms		
	Communication	RS485, CAN, Ethernet, SNMP (optional), backfeed protection card (optional), WIFI (optional), 4G (optional), dry contacts (optional)		
Environment	Operating Temperature	-10~40°C		
	Storage Temperature	-40~70°C		
	Relative Humidity	0~95% non condensing		
	Audible Noise	60~75dB		
	Altitude	<1000m (over 1000m, derating rate based on EN/IEC 62040-3, max 4000m)		
Physical	Protection class	IP21 (can be customized)		
	Monitoring	7-inch LCD	12-inch LCD touch screen	
	Dimension (W*D*H, mm)	600×830×1207	600×830×2000	1400×980×2010
	Net weight (kg)	Approx. 280kg	Approx. 500kg	Approx. 1091kg
	Cabinet Color	RAL7035 (can be customized)		
Standards	Certification	TLC, CE (IEC/EN62040-1, IEC/EN62040-2), etc		

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Small UPS

Power Range

Single Phase In and Single Phase Out: 1~20kVA
Three Phase In and Three Phase Out: 10~30kVA
Three Phase In and Single Phase Out: 10~30kVA

Features

Reliable

- Online double conversion design to ensure high reliability of power supply
- DSP full digital control, high output voltage regulation, with self-protection and fault diagnosis functions
- Wide input voltage/frequency, adapt to harsh electrical environment

Efficient

- High efficiency up to 91%, reduce energy consumption, green and energy saving
- High input power factor up to 0.99, reduce the operation cost
- Built-in Eco mode for great energy savings
- The output power factor is 0.8, higher load capacity

Easy

- LCD display, easy to check the operation mode and status of UPS system
- Self-check of fan fault and smart fan speed control
- Support RS232 and USB



Sinexcel 1:1 UPS 6kVA



Sinexcel 3:3 UPS 30kVA

Singles Phase UPS Specifications

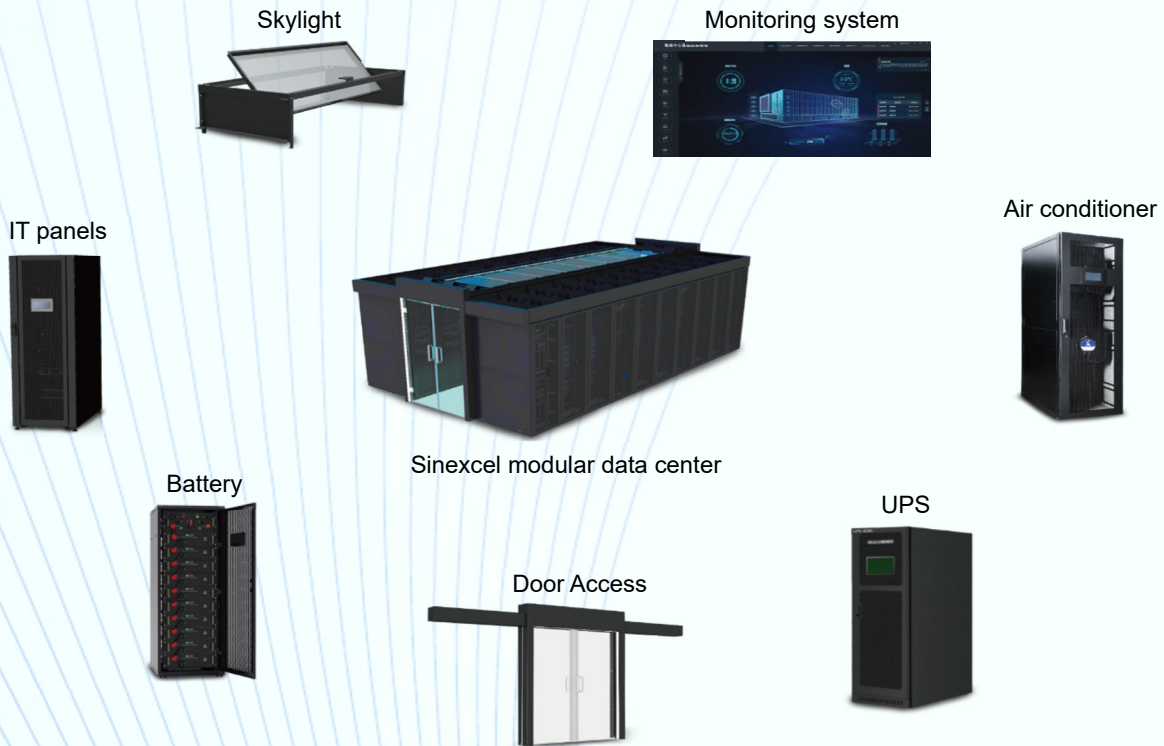
MODEL		UPS 1KVA	UPS 2KVA	UPS 3KVA	UPS 6KVA	UPS 10KVA		
Rated Capacity		1kVA/0.8kW	2kVA/1.6kW	3kVA/2.4kW	6kVA/4.8kW	10kVA/8kW		
Input: Output		1-in: 1-out (Single phase+PE)						
INPUT	Rated Voltage	100/110/115/120/127VAC or 200/208/220/230/240VAC			208/220/230/240VAC			
	Voltage Range	55-150VAC/110-300VAC@50% load 85-149VAC/160-280VAC@100% load			110-300VAC@50% load 176-280VAC@100% load			
	Frequency Range	40-70Hz			46-54Hz@50Hz; 56-64Hz@60Hz			
	Power Factor	> 0.99 (100% load)						
OUTPUT	Output Voltage	100/110/115/120/127VAC or 200/208/220/230/240VAC			208/220/230/240VAC			
	Voltage Regulation (battery mode)	1%						
	Frequency Range (Sync correction range)	47-53Hz or 57-63Hz			46-54Hz or 56-64Hz			
	Frequency Range (battery mode)	50Hz±0.25Hz or 60Hz±0.3Hz			50 or 60Hz±0.1Hz			
	Crest Factor	3:1						
	Harmonic Distortion	≤2%THDi (linear load); ≤5%THDi (nonlinear load)						
	Waveform (battery Mode)	Sine wave						
	Switching Time	Power Supply to Battery	0					
		Inverter to Bypass	4ms			0		
	Efficiency	Normal Mode	88%	88%	90%	92%	93%	
Battery Mode		83%	87%	88%	90%	91%		
BATTERY	Standard	Battery Model	12V/9Ah					
		Qty	2	4	6	16~20	16~20	
		Standard Charging Time	reach to 90% with 4 hours charging			reach to 90% with 9 hours charging		
		Max Discharge Current	1A			1A/2A		
		Charging Voltage	27.4VDC±1%			218.4VDC±1% / 273VDC		
	Long backup	Battery Model	Depends on capacity of external batteries					
		Qty						
		Max Discharge Current						
		Charging Voltage						
	SYSTEM	Standard	W*D*H(mm)	282*145*220	397*145*220	421*190*318	369*190*688	442*190*688
Net Weight(kg)			9.8	17	27.6	61/74	66/76	
Long backup		W*D*H(mm)	282*145*220	397*145*220		369*190*318	442*190*318	
		Net Weight(kg)	4.1	6.8	7.4	12	16	
Monitoring		Interface	LCD					
		Info	System capacity, load capacity, battery capacity, working modes (normal mode, battery mode, bypass mode), input/output voltage, fault display					
		Warning Alarm	Battery Mode	Alarm every 4 seconds				
			Low Battery	Alarm every 1 seconds				
			Overload	Alarm every 1 seconds				
Fault			Continuously beeping					
Control & Management	Intelligent RS-232/USB (optional) Support Windows 2000/2003/XP/Vista/2008, Windows 7/8, Linux and Mac							
	Power supply supports SNMP management and network management (optional)							
ENVIRONMENT	Humidity	20-90%RH (No condensing)			0-95%RH (No condensing)			
	Temperature	Operation Ambient Temperature: 0-40℃			0-50℃	0-40℃		
	Audible Noise (1 meter)	<50dB			<55dB	<58dB		

Three Phase UPS Specifications

MODEL		UPS 10KVA	UPS 15KVA	UPS 20KVA	UPS 30KVA	
Rated Capacity		10kVA/9kW	15kVA/13.5kW	20kVA/18kW	30kVA/27kW	
Input: Output		3-in: 3-out				
INPUT	Rated Voltage	3*400VAC (3Ph+N)				
	Voltage Range	190-520VAC@50% load; 305-478VAC@100% load				
	Frequency Range	46-54Hz@50Hz; 56-64Hz@60Hz				
	Power Factor	> 0.99 (100% load)				
OUTPUT	Output Voltage	3*400VAC (3Ph+N)				
	Voltage Regulation (Battery mode)	±1%				
	Frequency Range (Sync correction range)	46-54Hz or 56-64Hz				
	Frequency Range (Battery mode)	50Hz±0.1Hz or 60Hz±0.1Hz				
	Crest Factor	3:1				
	Waveform Distortion	≤2%THDi (linear load); ≤5%THDi (nonlinear load)				
	Waveform (battery Mode)	Sine wave				
	Switching Time	Power Supply to Battery	0			
		Inverter to Bypass	0			
	Efficiency	Normal Mode	91%	92%	92%	92%
		Battery Mode	87%	88%	88%	89%
BATTERY	Standard	Battery Model	12V/9Ah			
		Qty (18-20pcs)	20pcs	20pcs*2 packs	20pcs*3 packs	
		Standard Charging Time	reach to 90% with 9 hours charging			
		Max Discharge Current	1A	2A	2A	4A
		Charging Voltage	273VDC±1% (based on 20pcs batteries)			
	Long Backup	Battery Model	Depends on capacity of external batteries			
		Qty				
		Max Discharge Current				
		Charging Voltage				
	SYSTEM	Standard	W*D*H(mm)	815*250*826	815*250*826	815*300*1000
Net Weight(kg)			109	164	164	233.5
Long Backup		W*D*H(mm)	592*250*576			
		Net Weight(kg)	38	40	40	64
Monitoring		Interface		LCD		
		Info		System capacity, load capacity, battery capacity, working modes (normal mode, battery mode, bypass mode) input/output voltage, fault display		
		Warning Alarm	Battery Mode	Alarm every 4 seconds		
			Low Battery Power	Alarm every 1 seconds		
			Overload	Alarm every 1 seconds		
			Fault	Continuously beeping		
	Control&Management	Intelligent RS-232/USB (optional) Support Windows 2000/2003/XP/Vista/2008, Windows 7/8, Linux and Mac				
Power supply supports SNMP management and network management (optional)						
ENVIRONMENT	Humidity	0-95%RH (No condensing)				
	Temperature	Operation Ambient Temperature: 0-40℃				
	Audible Noise (1 meter)	<60dB	<65dB			

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Modular data center solution



Introduction

Sinexcel modular data center integrates cabinets, UPS systems, cooling system, monitoring systems, isolated cold aisle and other subsystems into one module, provide safe, reliable, energy-saving and efficient support for IT equipment, meet the requirements of rapid deployment and flexible expansion of different data centers.

Application scenarios

Applicable to small and medium-size data centers
Meets the data center deployment of Government, Education, Medical institutions, Bank branches, Enterprise headquarters, Smart industrial park, Rail transit, Airport, Customs and IDC.

Features

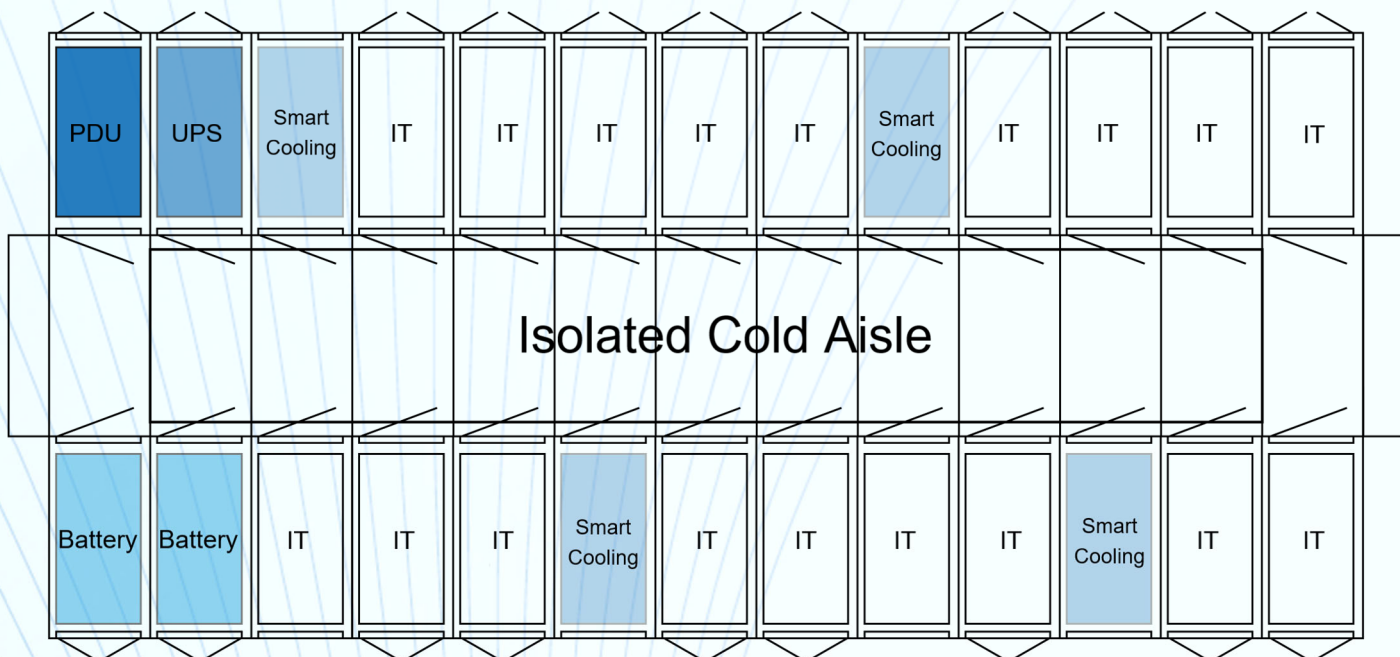
High security

Engineering productization, greatly improving reliability
Adopt modular UPS power supply, N+X redundant structure
Using nine-fold profile cabinets, strong load-bearing stability
24h online monitoring, fault alarm

Rapid deployment

Highly integrated modular system, rapid deployment and flexible expansion
Subsystems are pre-manufactured in the factory
Pre-commissioning for dynamic power monitoring system, only the hardware part needs to be installed on site
Directly installed on the cement floor without professional room decoration

Typical layout dual row modular data center



Specifications

Cabinet System	
Dimension (W*D*H, mm)	600*1100*2000 or 600*1200*2000
Door	The front door: single-open mesh door, the back door: double-open mesh door
PDU	Input current 32A, output 20 channels 10A, 4 channels 16A
Closed channel	300/600 Wide skylight (glass, metal plate)
Door access	Automatic / Manual
Available space	42U
Power Supply and Distribution System	
Power supply	380V 50Hz/60Hz
Integrated UPS	50~2400KVA Modular UPS optional
Backup time	Free configuration according to customer needs
Power distribution cabinet	Intelligent power distribution (main circuit monitoring) / Precision power distribution (main branch monitoring)
Lightning protection level	A/B/C class optional
Cooling System	
Cooling capacity	Row-level cooling capacity 25/40kW, Room level refrigeration 17~100kW
Power supply	380V 50Hz/60Hz
Operating temperature	-20°C~45°C (Optional low temperature component up to -40°C)
Air flow	Horizontal air flow / Down air flow
Monitoring and Management System	
Monitoring host	1U Monitoring Host + Monitoring touch display
Environmental monitoring	Temperature and humidity, smoke, water leakage, video monitoring, access control
Dynamic monitoring	Power distribution cabinet, UPS power supply, Precision air conditioner, Battery
Mobile operations	Sound and light, SMS, APP, LAN

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VRLA battery



Features

- Design life time is up to 10 years
- Low self-discharge rate
- Safe and reliable seal
- Strong charge capability, high sealing reaction efficiency
- Operating temperature range: -15°C~45°C

General specifications of Sinexcel SH series VRLA battery

Model	Rated voltage (V)	Ah@25°C	Dimension W*D*H, mm	Weight (kg)
SH1217	12	17	181*76*167	5.4
SH1224	12	24	165*125*176	7.6
SH1238	12	38	196*165*165	12.2
SH1265	12	65	314*166*169	20.0
SH1280	12	80	350*167*178	23.2
SH12100	12	100	330*174*217	29.0
SH12120	12	120	375*174*219	33.8
SH12150	12	150	483*171*218	41.5
SH12200	12	200	522*234*218	57.8
SH12250	12	250	534*271*225	71.0

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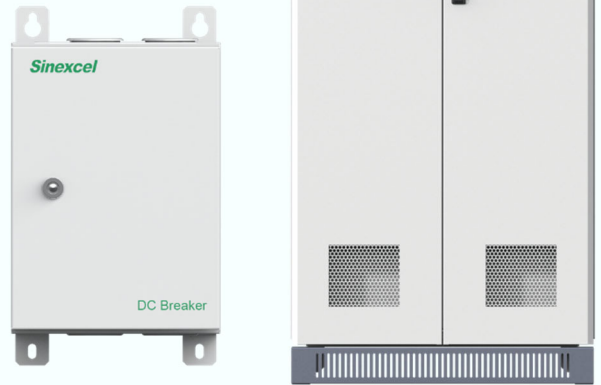
DC breaker cabinet (box)

Introduction

Sinexcel DC breaker Box series is a new type of fixed battery switchgear developed and designed according to the technical requirements of users. This switchgear is suitable for parallel connection of battery packs, after which the total current is input to the UPS.

Features

High breaking capacity, good dynamic and thermal stability, flexible electrical design scheme, simple structure, firmness, flexible use, and can be customized according to customer needs. The wiring diagram is printed on the panel, which is convenient and intuitive, allowing customers to understand the wiring connection.



Sinexcel DC breaker

Specifications

Dimension	600*800*1000(customizable)	Protection grade	IP20
Weight	≤380kg (Depending on the actual situation, the weight will vary)	Maintenance	Front and Rear access
Import capacity	1~1500A	Working temperature	-5°C~40°C
Export capacity	1~1500A	Working humidity	5%~95%
Import channel	≤4 channels	Altitude	0~2000m, above 2000m derating
Export channel	1 channel	MCCB Brand	Depends on customer

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UPS power distribution cabinet

Introduction

Sinexcel UPS power distribution cabinet is package product for Sinexcel UPS systems. It includes low-voltage power distribution products at the front and back ends of the UPS power supply. It mainly includes mains power distribution cabinets, UPS input cabinets, and UPS output cabinets. Dimensions can be customized according to the project.

Features

- The design focuses on reliability, safety and convenience of operation and maintenance.
- Simple structure, simple operation, and optional cabinet color.
- Flexible ways of entering and exiting lines; single-open front door and double-open rear door, front operation and rear maintenance.
- Standard indicator light, optional intelligent monitoring system to monitor the electrical parameters of the main circuit and branch circuit, and can communicate with the monitoring system through the RS485 interface.
- Customized services provide flexible, reliable, safe and efficient solutions.



Sinexcel Power Distribution Unit

Specifications

Project	Mains power distribution cabinet	UPS Input cabinet	UPS Output cabinet
Input	Circuit Breaker	Busbar / Circuit Breaker	Circuit Breaker
Dimension(W*D*H)	600/800/1000*800/1100/1200*2000/2200	Protection grade	IP20
Power supply	380/400/415V 50/60Hz	Output	
Monitoring parameter	Voltage/Current/Power (Mains/branch)	Working temperature	-5°C~40°C
Communication type	RS485	Working humidity	5%~95%RH
Lightning protection level	A/B/C class optional	Altitude	0~2000m , > 2000m derating use
Maintenance	Front and Rear access	MCCB Brand	Depends on customer