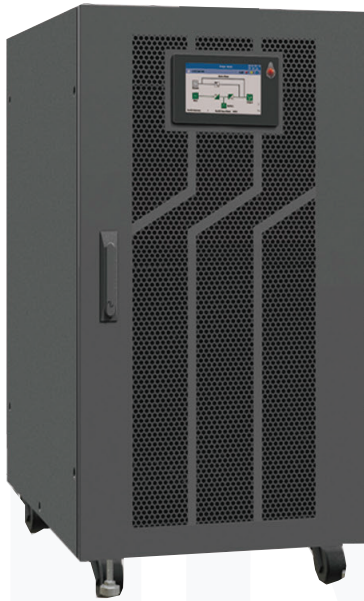


EMPOWER series



Modular design

All units adopt modular design, including power module, bypass module, monitoring module, can be easily integrated in MDC or customized cabinet.

Power module, Bypass module, Monitoring module, ECU control module, all these modules are hot-swappable.

Green and power saving

- High input power factor, it is up to 0.99.
- 3-level topology design, efficiency is up to 95.8%.
- THDi<3% (100% linear load).
- The UPS will work in sleeping mode when the load is very small.

LBS function

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system.

EM Module

10/15/20/25/30kVA (2U)

Parallel redundancy function

- Support parallel expanded operation: maximum is 6 units.
- Support sharing batteries for the UPS in parallel.

Flexible battery configuration

- Batteries number of each group can be selected from 30 pieces to 50 pieces.
- Large charging current can meet the requirement of long time backup.

Strong load capacity

- Output power factor is 1.0, UPS can supply power to 100% unbalanced load.
- High adaptability for load, it can connect full inductive load or capacitive load.

Intelligent management

- With 7 inches (standard) and 10 inches (optional) colorful touch LCD screen.
- Support recording and exporting history logs and fault logs.
- Support SNMP, RS232, RS485, BMS, Dry contact interface.
- Support upgrade of CAN of power module inside of cabinet.
- EPO & REPO function.

Compatible with generator

- Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator.

UPS SYSTEM TEHCNICAL SPECIFICATION

Module Model		EM 1-33-00-10	
Cabinet Model		EC 1-33-30	EC 1-33-50
Cabinet capacity (VA)		30k	50k
Module capacity (VA)		10k	
Max. number		3	5
Module Model		EM 1-33-00-15	
Cabinet Model		EC 1-33-45	EC 1-33-75
Cabinet capacity (VA)		45k	75k
Module capacity (VA)		15k	
Max. number		3	5
Module Model		EM 1-33-00-20	
Cabinet Model		EC 1-33-60	EC 1-33-100
Cabinet capacity (VA)		60k	100k
Module capacity (VA)		20k	
Max. number		3	5
Module Model		EM 1-33-00-25	
Cabinet Model		EC 1-33-50	EC 1-33-125
Cabinet capacity (VA)		50k	125k
Module capacity (VA)		25k	
Max. number		2+1 (redundancy)	5
Module Model		EM 1-33-00-30	
Cabinet Model		EC 1-33-60	EC 1-33-150
Cabinet capacity (VA)		60k	150k
Module capacity (VA)		30k	
Max. number		2+1 (redundancy)	5
INPUT			
Nominal voltage		380/400/415Vac, (3Ph+N+PE)	
Operating voltage range		138~305Vac for 40% load; 305~485Vac for 100% load	
Operating frequency range		40Hz~70Hz	
Power factor		≥0.99	
Harmonic distortion (THDi)		≤3% (100% linear load)	
Bypass voltage range		Max. voltage:220V: +25% (optional+10%, +15%, +20%); 230V: +20% (optional +10%, +15%); 240V: +15% (optional +10%) Min. voltage: -45% (optional-10%, -15%, -20%, -30%)	
Bypass frequency range		Frequency protection range: ±10%	
Power Walk In		Support	
Generator input		Support	
OUTPUT			
Rated voltage		380/400/415Vac, (3Ph+N+PE)	
Power factor		1.0	
Voltage regulation		±1%	
Output frequency	Line mode	Synchronize with input, when the input frequency > ±10% (±1%/±2%/ ±3%/±4%/±5% optional), output 50/60 (±0.1Hz)	
	Bat. mode		
Crest factor		3:1	
Harmonic distortion (THDv)		≤1% with linear load; ≤3% with nonlinear load	
Efficiency		up to 95.8%	
BATTERY			
Battery voltage		Optional Voltage: ±180/192/204/216/228/240/252/264/276/288/300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc~600Vdc (30~50 pcs, 36 pcs default, 36~50 pcs no power derating; 32~34 pcs output power factor 0.9; 30 pcs output power factor 0.8)	
Power module charge current		18A (Max.)	
SYSTEM FEATURES			
Transfer time		Utility to Battery : 0ms; Utility to Bypass: 0ms	
Overload	Line mode	≤110%, 60min; ≤125%, 10min; ≤150%, 1min; to bypass. > 150% Shut down Immediately. 135% overload for long term; >1000% overload for 100 ms	
	Bypass mode		
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately	
Low battery voltage		Alarm and Switch off	
Self-diagnostics		Upon Power On and Software Control	
Backfeed protection		Support	
EPO (optional)		Shut down UPS immediately (turn to bypass optional)	
Battery		Advanced Battery Management	
Noise suppression		Complies with EN62040-3	
Audible & visual alarms		Line Failure, Battery Low, Overload, System Fault	
Status LED & LCD display		Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault	
Reading on the LCD display		Input, Output, Battery, Command, Setting, Maintenance	
Communication interface		RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)	
ENVIRONMENTAL			
Operating temperature		0C~40 C	
Storage temperature		-25C~55 C	
Humidity range		0~95% (non condensing)	
Altitude		<1500m, derating required when >1500m	
Noise level		<58dB	<61dB
PHYSICAL			
Dimension WxDxH (mm)	UPS cabinet	600 × 850 × 1200	
	Powermodule	440 × 620 × 86 (2U)	
Net weight (kg)	UPS cabinet	130~145	145~170
	Power module	10kVA: 19; 15~30kVA: 21	
STANDARDS			
Safety		IEC/EN62040-1, IEC/EN62477-1	
EMC		IEC/EN62040-2 (IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC610	00-4-5, IEC61000-4-6, IEC61000-4-8)

Specifications are subject to change without prior notice.