



- Wide input Range 
- Power Factor **1.0 PFC** 
- Double Conversion **VFI TYPE** 
- Long Back-up 
- IFR 
- ECO 
- Interface SNMP 
- Hot swappable 

Modular UPS consists of multiple independent UPS modules working together. Each module typically includes its own battery, inverter, and other necessary components for providing backup power to connected devices or systems. Modular Design offers several advantages over traditional UPS systems in form of, scalability allowing easy expansion suitable for businesses with changing power requirements. Redundancy for uninterrupted operation, simplifies maintenance tasks optimizing reduces downtime, optimizing efficiency by automatically adjusting the number of active modules based on the current power demand.

Modular UPS systems are popular choices for data centers, telecommunications facilities, and other critical applications where reliable backup power is essential.

MODULAR DESIGN

- All units adopt modular design, including power module, bypass module, monitoring module, can be easily integrated.
- The UPS will keep on single or parallel working, if any module fail.
- Power module, Bypass module, Monitoring module, ECU control module, all these modules are hot-swappable
- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust

HIGH RELIABILITY

- Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V.
- High input power factor, it is up to 0.99.
- UPS adopts multiple digital bus and redundancy parallel control system, making sure the whole system keep online if any single circuit fail.
- 3-level topology design, efficiency is up to 96%
- THDi <3% (100% linear load).
- The UPS will work in sleeping mode when the load is very small.

GREEN AND POWER SAVING

LBS FUNCTION

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

PARALLEL REDUNDANCY FUNCTION

| Support parallel expanded operation: maximum is 8 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

COMPATIBLE WITH GENERATOR

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

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 upgrading FW&SW on line
 | EPO & REPO function

STRONG LOAD CAPABILITY

| 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

SPECIFICATIONS

Module Model	VM3300E-RM-10	
Cabinet Model	VM3300-30	VM3300-50
Cabinet Capacity	30kVA	50kVA
Module Capacity	10kVA	
Max. Number	3	5
Module Model	VM3300E-RM-15	
Cabinet Model	VM3300-45	VM3300-75
Cabinet Capacity	45kVA	75kVA
Module Capacity	15kVA	
Max. Number	3	5
Module Model	VM3300E-RM-20	
Cabinet Model	VM3300-60	VM3300-100
Cabinet Capacity	60kVA	100kVA
Module Capacity	20kVA	
Max. Number	3	5
Module Model	VM3300E-RM-25	
Cabinet Model	VM3300-50	VM3300-125
Cabinet Capacity	50kVA	125kVA
Module Capacity	25kVA	
Max. Number	2+1 (Redundancy)	5
Module Model	VM3300E-RM-30	
Cabinet Model	VM3300-60	VM3300-150
Cabinet Capacity	60kVA	150kVA
Module Capacity	30kVA	
Max. Number	2+1 (Redundancy)	5

SPECIFICATIONS (Contd.)

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 (THD)	≤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 tracking 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	Line mode	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)
Frequency	Bat. mode	(50/60±0.1%)Hz
Crest factor	3:1	
Harmonic distortion (THDv)	≤ 1% with linear load; ≤3% with nonlinear load	
Efficiency	Up to 95.8%	
Battery		
Battery voltage	±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)	
Power module charge current	18A (Max.)	
System Features		
Transfer time	Utility to Battery: 0ms; Utility to bypass: 0ms	
Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min >150% 1.2s shut down inverter
	Bypass mode	30°C: 135% for long term; 40°C: 125% for long term; >1000%, 100ms
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	0°C~40°C	
Storage temperature	-25°C~55°C	
Humidity range	0~95% (Non condensing)	
Altitude	<1000m, derating required when >1000m	
Noise level	<58dB	<61dB

Physical			
Dimension W×D×H	UPS cabinet	600×850×1200mm	
	Power module	440×620×86mm (2U)	
Net weight	UPS cabinet	130kg~145kg	145kg~170kg
	Power module	10kVA: 19kg; 15~30kVA: 21kg	
Standards			
Safety	IEC/EN 62040-1, IEC/EN 62477-1		
EMC	IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)		

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- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust

HIGH RELIABILITY

- Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V.
- High input power factor, it is up to 0.99.
- UPS adopts multiple digital bus and redundancy parallel control system, making sure the whole system keep online if any single circuit fail.
- 3-level topology design, efficiency is up to 96%
- THDi <3% (100% linear load).
- The UPS will work in sleeping mode when the load is very small.

GREEN AND POWER SAVING

LBS FUNCTION

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VRLA & LITHIUM BATTERY SUPPORTABLE

| Compatible with VRLA or lithium battery.

PARALLEL REDUNDANCY FUNCTION

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COMPATIBLE WITH GENERATOR

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SPECIFICATIONS

Module Model	VM3300E-RM-40	VM3300E-RM-50	VM3300E-RM-60
Cabinet Model	VM3300-80/120/200/320	VM3300-200/300/400/500/600/800/1000	VM3300-300/600/840/1080/1200
Capacity	80kVA~320KVA	200kVA~1000KVA	300kVA~1200KVA
Module Capacity	40KVA	50KVA	60KVA
Max. Number	2 / 3 / 5 / 8	4/6/8/10/12/16/20	5/10/14/18/20
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 (THD)	≤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 tracking 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	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)		
Line mode	(50/60±0.1%)Hz		
Bat. mode	3:1		
Crest factor	≤2% with linear load; ≤4% with nonlinear load		
Harmonic distortion (THDv)	Upto 96%		
Efficiency			
Battery			
Battery voltage	360VDC~600VDC		
Battery type	VRLA / Li		
Power module charge current	20A (Max.)		

SPECIFICATIONS (Contd.)

Module Model	VM3300E-RM-40	VM3300E-RM-50	VM3300E-RM-60	
Cabinet Model	VM3300-80/120/200/320	VM3300-200/300/400/500/ 600/800/1000	VM3300-300/600/840/ 1080/1200	
System Features				
Transfer time	Utility to Battery: 0ms; Utility to bypass: 0ms			
Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter		
	Bypass mode	30°C: 135% for long term; 40°C: 125% for long term; >1000%, 100ms		
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	0°C~40°C			
Storage temperature	-25°C~55°C			
Humidity range	0~95% (Non condensing)			
Altitude	<1000m, derating required when <1000m			
Noise level	<66dB	<73dB		
Physical				
Dimension W x D x H (mm)	UPS cabinet (S/F)	80/120kVA: 600×850×1200 200/320kVA: 600×850×2000	200/300/400kVA: 600×850×2000 500/600kVA: 1200×850×2000 800/1000kVA: 2000×850×2000	300kVA: 600×850×2000 600kVA: 1200×850×2000 840/1080kVA: 2000×850×2000 1200kVA: 2200×850×2000
	Power module	440×620×130mm		
Net weight (kg)	UPS cabinet	80kVA: 155; 120kVA: 165 200kVA: 270; 320kVA: 290	200kVA: 270; 300kVA: 290 400kVA: 310; 500kVA: 650 600kVA: 720; 800kVA: 980 1000kVA: 1080	300kVA: 290; 600kVA: 720 800kVA: 980; 1080kVA: 1080 1200kVA: 1200
	Power module	33kg	34kg	35kg
Safety	IEC/EN 62040-1, IEC/EN 62477-1			
EMC	IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)			

S: Without or only with one maintenance bypass breaker

F: With mains, bypass, maintenance bypass and output breakers

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ORDERING INFORMATION

Part No.	Description
Module Model	
VM3300E-RM-10	10KVA, PF1.0, 3: 3 Ph Modular module
VM3300E-RM-15	15KVA, PF1.0, 3: 3 Ph Modular module
VM3300E-RM-20	20KVA, PF1.0, 3: 3 Ph Modular module
VM3300E-RM-25	25KVA, PF1.0, 3: 3 Ph Modular module
VM3300E-RM-30	30KVA, PF1.0, 3: 3 Ph Modular module
VM3300E-RM-40	40KVA, PF1.0, 3: 3 Ph Modular module
VM3300E-RM-50	50KVA, PF1.0, 3: 3 Ph Modular module
VM3300E-RM-60	60KVA, PF1.0, 3: 3 Ph Modular module

Cabinet Model

VM330-80/120/200/320	40 KVA Modular capacity, supports Max 2/3/5/8, Cabinet Capacity 80kVA~320kVA
VM3300-200/300/400/500/600/800/1000	50 KVA Modular capacity, supports Max 4/6/8/10/12/16/20, Cabinet Capacity 200kVA~1000kVA
VM3300-300/600/840/1080/1200	60 KVA Modular capacity, supports Max 5/10/14/18/20, Cabinet Capacity 300kVA~1200kVA

Part No.	Description
VM3300-30K-10	30KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 15KVA module, without battery and module inside.
VM3300-50K-10	50KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 15KVA module, without battery and module inside.
VM3300-100K-10	100KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 15KVA module, without battery and module inside.
VM3300-45K-15	45KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 15KVA module, without battery and module inside.
VM3300-75K-15	75KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 15KVA module, without battery and module inside.
VM3300-150K-15	150KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 15KVA module, without battery and module inside.
VM3300-60K-20	60KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 20KVA module, without battery and module inside.
VM3300-100K-20	100KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 20KVA module, without battery and module inside.
VM3300-200K-20	200KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 20KVA module, without battery and module inside.
VM3300-50K-25	50KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 25KVA module, without battery and module inside.
VM3300-125K-25	125KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 25KVA module, without battery and module inside.
VM3300-250K-25	250KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 25KVA module, without battery and module inside.
VM3300-60K-30	60KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 30KVA module, without battery and module inside.
VM3300-150K-30	150KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 30KVA module, without battery and module inside.
VM3300-300K-30	300KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 30KVA module, without battery and module inside.
VM3300-80K-40	80KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 40KVA module, without battery and module inside.
VM3300-120K-40	120KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 40KVA module, without battery and module inside.
VM3300-200K-40	200KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 40KVA module, without battery and module inside.
VM3300-400K-40	400KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 40KVA module, without battery and module inside.
VM3300-480K-40	480KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 40KVA module, without battery and module inside.
VM3300-100K-50	100KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.

Part No.	Description
VM3300-150K-50	150KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-200K-50	200KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-250K-50	250KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-300K-50	300KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-400K-50	400KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-500K-50	500KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-600K-50	600KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-800K-50	800KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.
VM3300-1000K-50	1000KVA Module UPS, PF1.0, Equipped with main, bypass, maintenance and output switches, Support 50KVA module, without battery and module inside.