



# RM Series Modular Online UPS 60-600kVA (380V/400V/415V)

RM600/60D series are modular online UPS with brand-new topology, a bidirectional DC-DC converter circuit, which greatly improve the system performance and guarantees high efficiency.

Its compact design ensures the power density, achieve this 600kW system occupies only an area of 0.9m<sup>2</sup>. RM series is considered to be an excellent power supply solution for large data centers and facilities.





#### Power Module

The cabinet of RM600/60D contains 10 power modules, each of them is 60kVA power capacity in 2U height. With the knob on the front panel, the UPS can achieve hot-swappable without power outage of the load, make it available for redundancy and maintenance online.

- Modular Compact Cabinet Design contains maximum 10 slots.
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- Module Status LED Indicator show the status of each power module.
- Bidirectional DC-DC converter circuit achieve 30% charger which greatly improve the system performance.
- Overall efficiency reaches 97%, the collaboration between batteries and power grid improve the UPS utilization significantly.



## Bypass Monitoring Module

This series are equipped with the bypass and monitoring module full of intelligent slots, communication interface, battery cold start buttons and adequate dry contacts. With these various ports, it can satisfy users a convenient data transfer service, provide comprehensive monitoring.



- Diverse communication interface and multiple standard part such as RS485, USB, CAN and programmable dry contacts.
- Convenient CAN communication for software burning and version upgrade after transferring to maintenance mode.
- Isolation between LCD and monitoring board, connect them by network cable, significantly improve the reliability and prevent the damage of the DSP.

#### Application

All kinds of medium and large data center, network servers, control system, precision instruments and intelligent equipments.

- Financial institution
- Education, office and PC
- Military and government
- Communications
- Medical
- Power supply manufacture



#### Friendly Interface

Provide graphical and text based information of alarms, status data, and instructions that users can have more friendly display and safer operation.







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## High Density, Flexible, Artistic

- High power density, 60kW power modules and 2U-high body footprint for 600kVA is 0.88m², power density.
  682kW/m², saving great space of data center.
- Flexible capacity expansion and redundancy from 60kVA to 1.8MW, max 30 power modules 3 cabinets in parallel.
- Ultra-large 10.1 inch color touch LCD display for IoT application and intelligent monitoring.



3 units in parallel 10 inch LCD

### Features

- High efficiency, up to 97%
- Support Lithium battery
- Intelligent staggering power consumption, become more flexible and save more energy
- Double side DC-DC topology platform, support charging power reaching 30%

- High power density
- BMS lithium battery data can be seen on the screen including the temperature and voltage of each cell
- Friendly interface with 10" touch color LCD with graphic display, intuitive information and easier to operate
- Modular design, up to 30 power modules in parallel online hot-swappable N+X redundancy

#### Specification

Model			RM 600/60D
System Capacity			600kVA
Power Module Capacity			60kVA/kW
	Dual Input		Standard
Input	Phase		3Phase+Neutral+Ground, 380/400/415VAC (line-line)
	Rate Frequency		50/60Hz
	rtate i requeriey		323~478Vac (line-line), full load
	Input Voltage Range		323V~138Vac (line-line), load decrease linearly from
			100% to 30% according to the min phase voltage
	Input Frequency Range		40Hz ~ 70Hz
	Inpput PF		>0.99
	Input THDi		<3% (100% Linear load)
	Rate Voltage		380/400/415VAC (line-line)
Bypass	Rate Frequency		50/400/413VAC (iiile-iiile)
	Rate Frequency		
	Input Voltage Range		Settable, default -20%~+15%
			Up limit: +10%, +15%, +20%, +25%
			Down limit: -10%, -15%, -20%, -30%, -40%
	Bypass Frequency Range		Settable, ±1Hz, ±3Hz, ±5Hz
	Bypass Overload		110% for long term operation; 110%~125% for 10 mins;
			125%~150% for 1 min; >150% for 200ms
Output	Rate Voltage		380/400/415VAC (line-line)
	Rate Frequency		50/60Hz
	Output PF		1
	Voltage Regulation		±1%
	Output THDu		<1% Linear load; <5%, Non-linear load
	Inverter Overload		<110%, 1hour; 110%~125%, 10mins;
	liverter Overload		125%~150% for 1min; >150% for 200ms
	Rate Frequency		50/60Hz
	Frequency Precision		± 0.1%
Battery			±180~264VDC
			30pcs derate to 0.7;
	Voltage		32~34pcs derate to 0.8;
			36~38pcs derate to 0.9;
			40~44pcs
	Voltage Precision		1%
	Charge Power		Up to 30% * Output active power
		AC Mode	>97%
System	Efficiency Display	Battery Mode	>96%
		ĺ	LED+Color touch LCD
			Standard: RS485, USB, CAN, Programmable Dry Contact
	Interface		Intelligent card slot*2, Extendable dry contact slot
	Option		SNMP card, AS400 card, Parallel kit, SPD, Dual input kit, LBS
	Temperature		Operation: 0~40 °C Storage: -40~70 °C
	Relative Humidity		0~95% Non-condensing
	Noise(1 meter)		75dB @ 100% load, 70dB @ 45% load
	Altitude		<1000m. Within 1000m~2000m, 1% power derating for every 100m
	Application Standard		Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3
Physical	Dimension Cabinet		800*1100*2000
	(W*D*H,mm)		550*750*85
	Weight (kg)	Cabinet	443
		Power Module	35.7
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