RM Series Modular Online UPS
100-600kVA (380V/400V/415V)

The RM Series modular online UPS the single cabinet power rating covers from 100kVA to 600kVA, provides the highest power density of 100kW power modules in 4U height, 4 units can be paralleled for capacity maximum up to 3.2MW.

With the communication of BMS system, the RM series deliver the Lithium battery information of cell voltage and cell temperature.

Application

All kinds of medium and large data center, network servers, control system, precision instruments, communication system etc.
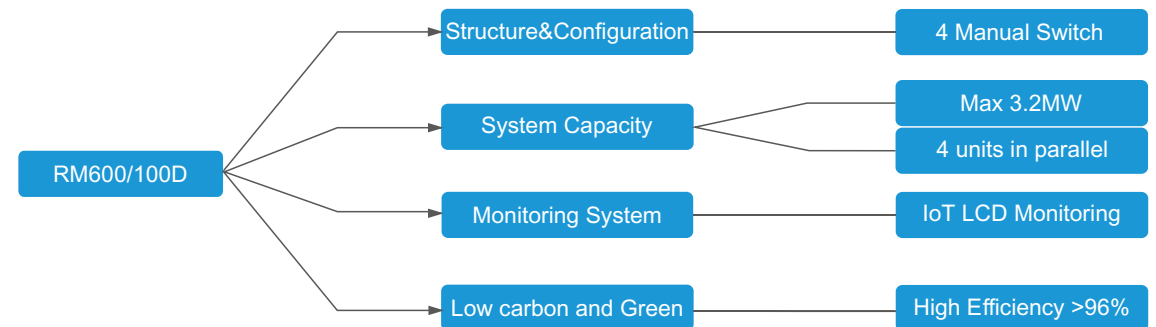
Features

- High efficiency, up to 96%

- Support Lithium battery

- Easy for power expansion and backup time expansion flexible and save more energy

- Modular design, up to 32 power modules in parallel online hot-swappable N+X redundancy

- High power density

- BMS lithium battery data can be seen on the screen of UPS after choosing the corresponding protocol

- Friendly interface with 10" touch color LCD with graphic display, intuitive information and easier to operate

- All round detection and monitoring system for safety

High Density, Modular, Scalable

- High power density, footprint for 600kW is 1.1m^2, power density 545kW/m^2, saving valuable data center space
- Scalable from 100kVA to 3.2MW, max 32 power modules in parallel

4 units in parallel

Friendly Interface

Provide graphical and text based information of alarms, status data, and instructions that users can have more friendly display and safer operation from this 10 inch color touch LCD screen for IoT application and intelligent monitoring.

Impact Structure Design

This series Modular UPS is equipped with hot-swappable power module and bypass & monitoring modules which is designed for easy maintenance and redundancy. 100kVA power capacity in 4U heigh module, combine with bypass module which is integrated various communication port.

- **Reliable Performance**
  3 level inverter, fully digital control, achieving input power factor>0.99, input THDi<3%, overall efficiency>96%.

- **Small Size Large Capacity**
  High power density, easy to expand to meet the larger data center application site.

- **Four Breakers**
  Equipped with input, bypass, output and maintenance bypass switch to save later construction.

- **Kinds of Cabinets**
  6 slots cabinet, flexible configuration for different project requirements and limit of the room space.

- **Various Data Transfer Port**
  Adequate ports, such as RS485,USB, CAN, programmable dry contact and SNMP card.

- **Convenient Software Buring & Upgrade Version**
  burning software without outage to the load, no need to pulling out the module.

Specification

Model		RM600/100D
System Capacity		600kVA
Power Module Capacity		100kVA/100kW
Input	Dual Input	Optinal
	Phase	3Phase+Neutral+Ground, 380/400/415VAC (line-line)
	Rate Frequency	50/60Hz
	Input Voltage Range	323~478Vac (line-line), full load; 323V~138Vac (line-line), load decrease linearly according to the min phase voltage
	Input Frequency Range	40Hz～70Hz
	Input PF	>0.99
	Input THDi	<3% (100% Linear load)
Bypass	Rate Voltage	380/400/415VAC (line-line)
	Rate Frequency	50/60Hz
	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% long term operation; 110% ~ 125% for 5 mins; 125% ~ 150% for 1 min; 150% ~ 400% for 1 s; >400% less than 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% for 1 hour; 110%~125% for 10 mins; 125%~150% for 1 min; >150% for 200ms
	Frequency Precision	±0.1%
Battery	Voltage	±180 ~ 288VDC 30 ~ 32pcs derate to 0.7 34 ~ 36pcs derate to 0.8 38pcs derate to 0.9 40 ~ 48pcs
	Voltage Precision	±1%
	Charge Power	Up to 15% * Output active power
System	Efficiency	AC Mode	>96%
		Battery Mode	>95%
	Display		LED+ Color touch LCD screen
	Interface		RS485, USB, CAN, Programmable Dry Contact, 2 Intelligent slots
	Option		SNMP Card, AS400 Card, Parallel kit, SPD, LBS, GSM
	Temperature		Operation: 0 ~ 40 ℃ Storge: -40~70℃
	Relative Humidity		0 ~ 95% Non-condensing
	Noise (1 meter)		75dB @ 100% load, 70dB @ 45% load
	Altitude		<1000m. Within 1000~2000m, 1% power derating for every 100m rise
Physical	Dimension (W*D*H,mm)	Cabinet	1000*1100*2000
		Power module	440*795*174
	Weight (kg)	Cabinet	400
		Power module	53.5