

RM Series Moular Online UPS

30~180kVA (380V/400V/415V)

The RM series rack modular, scalable, hot-swappable, online double conversion UPS ranging from 30kVA to 180kVA is designed to protect any critical load for medium and small data center achieving maximum availability. The RM series features the latest technology of 3-level technology and PFC input control, which guarantees high efficiency >96.5% and ultra-reliability, is the best choice for small and medium data center.



Features

Green & Efficiency

- ◆ Input THDi $\leq 3\%$ (non-linear load@100%), reducing grid pollution, minimizing harmonic mitigation costs, lowering cable losses, and providing bidirectional protection for both loads and the grid.
- ◆ Input PF >0.99, enhancing energy utilization, reducing distribution losses upstream of the UPS, and lowering customer investment costs.

Outstanding Performance

- ◆ Overall efficiency up to 96.5%, reducing operational energy consumption by 30% compared to the previous generation, significantly lowering customer operating costs.
- ◆ Output PF 1.0 delivers stronger load-bearing capacity at equivalent power, greater active power output, higher cost-effectiveness, and lower system investment costs, meeting high output power factor requirements across diverse application scenarios.

Economical and User-Friendly

- ◆ The RM180/30D reduces volume by 67% and height by 50% compared to the previous generation, enabling Flexible installation options support vertical mounting and server rack integration.
- ◆ Power module 2U height and weight <20kg enables single-person installation and maintenance.
- ◆ Black box logging records rectifier/inverter anomalies for rapid fault localization, significantly boosting O&M efficiency.
- ◆ Supports ± 15 to ± 25 pcs battery, configurable allocation according to the demands. Isolates single-cell failures, eliminating full-battery replacement and reducing long-term maintenance costs.
- ◆ Charging power reaches up to 30% of output power. High-current charging shortens charging time while enhancing compatibility with lithium-ion battery applications.

Specification

MODEL			RM060/30D	RM120/30D	RM180/30D
System Capacity			60kVA/60kW	120kVA/120kW	180kVA/180kW
Power Module Capacity			30kVA/30kW		
Input	Input		3P5W (3P + N+ PE)		
	Rate Voltage		380/400/415VAC (L-L); 220/230/240VAC (L-N)		
	Rate Frequency		50/60Hz		
	Input PF		>0.99		
	Current distortion		THDi <3% (100% non-liner load)		
	Voltage range		304V~478Vac (L-L),full load; 228V~304Vac(L-L), derate from 75% to 100% load		
	Frequency range		40 ~ 70Hz		
Bypass	Rate voltage		380/400/415VAC (L-L); 220/230/240VAC (L-N)		
	Voltage range		Range: -40%~+25%,Settable,default -20%~+15%		
	Frequency range		50/60Hz,Settable:±1Hz, ±3Hz, ±5Hz		
	Bypass overload		110%, Long time; 125%,10mins; 150%,1min; >150%,200ms		
Output	Rate voltage		380/400/415VAC (L-L); 220/230/240VAC (L-N)		
	Rate Freq.		50/60Hz		
	Output PF		1		
	Voltage regulation		±1.0%		
	Load response		<5% (20%-80%-20% step load)		
	Recovery time		<20ms (0%-100%-0% step load)		
	Output THDu		<1% @100% linear load <4% @100% non-linear load		
	Overload		≤ 110% for 1h, ≤ 125% for 10 mins, ≤ 150% for 1 min, > 150% for 200 ms		
	Synchronize window		Settable, ±0.5Hz-±5Hz, default ±3Hz		
	Slew rate		Settable, 0.5Hz/S-3Hz/S, default 0.5Hz/S		
	Max crest factor		3:1		
Battery	Rate voltage		±192VDC~±240VDC		
	Battery blocks No.		30~50 (30, derate load, 32-50 full load)		
	Charger capacity		up to 30% *Output power		
	Battery type		VRLA or Lithium Battery		
	Battery cold start		Yes		
System	Efficiency	AC Mode	Up to 96.5%		
		Battery Mode	Up to 96%		
	Display		LED+Touch Screen LCD (7")		
	Multilingual graphics display		Chinese, French, English, German, Italian, Spanish, Portuguese, Russian, Polish, Turkish		
	Configuration		USB, RS485, CAN, Parallel ports , Dry contacts, Battery cold-start;		
	Option		SNMP card, AS400 card, RS485 card, LBS, Parallel cable, Battery NTC		
	IP degree		IP20		
	Operation temperature		0 ~ 40 °C		
	Storage temperature		-25 ~ 55°C		
	Relative humidity		0 ~ 95% Non condensing		
	Elevation		≤ 1000 m; 1000m~ 2000 m with derating as 1% per 100 m		
	Noise (1 meter)		<60dB @ 50% load, <70dB @ 100% load		
	Applicable Standards		IEC 62040-1, IEC 62040-2		
Physical	Dimension (W*D*H,mm)	Cabinet	485*750*443 (10U,wheels not included)	485*850*625 (14U,wheels not included)	485*850*797 (18U,wheels not included)
		Power module	438*620*86 (2U)		
	Weight(kg)	Cabinet	98kg	160kg	200kg
		Power module	19.1kg		