



RX-MTR 15–120Kva

Modular UPS (15kVA/module)



RX-MTR UPS

A three-in-three-out high frequency online UPS, it is modularized with N+X redundancy. The product capacity overlays 15kVA to 120 kVA, convenient for customer's flexible allocation with gradual investment.

The RX-MTR UPS can solve almost all the power supply problems, such as utility failure, utility high voltage, utility low voltage, voltage sudden drops, oscillating of decreasing extent, voltage fluctuation, surge voltage, harmonic distortion (THD), optical interference, frequency fluctuating, etc.

This UPS has a wide application range, which can be from computer equipment to the automatic equipment communication system industry.

FUNCTIONS

• THREE-IN-THREE-OUT UPS

RX-MTR UPS is big power three-in-three-out UPS, whose load can be completely imbalance between three phases. When the output connects imbalance loads, the input currents of three phases are

mutually balanced, so the burden of three phases electric net are balanced.

• DIGITAL CONTROL

Each part of this UPS is implemented under digital control. The advantage is to avoid the risk of analog component invalidation, make the performance and the control system more excellent, steady and credible.

• 19 INCHES STANDARD CABINET

RX-MTR UPS adopts 19 inches standard cabinet, the appearance is attractive and decent, adopt with the server cabinet in equipment room very well. It also can save usage area of equipment room. The battery cabinet can be as the same as UPS cabinet in order to match up with each other.

• MODULARIZED DESIGN

RX-MTR UPS adopts modularized design, the capacity of single UPS module is 15kVA (that is 12kW). The UPS system is made up of one to eight parallel modules, max output current is 250 amperes. User can add module flexibly as the load increase. The connection between module and cabinet is simple to implement, module can be inserted or removed without system interruption, which reduces the mean time to repair.



- **N+X PARALLEL REDUNDANCY**

RX-MTR UPS adopts N+X parallel redundancy design, user can set different redundancy degree according to the importance of the load. While the redundancy module attain more than two, the dependability of UPS system achieves 99.999%, satisfying the reliability requirement of aviation and finance industry, etc.

- **FLEXIBLE PARALLEL REDUNDANCY SETTING**

RX-MTR UPS can be set through LCD any quantity of redundancy module, even as zero. When the load exceed the normal capacity (normal capacity equal max capacity minus redundancy capacity), UPS sends out sound warning of redundancy over load and LCD displays the warning information. As long as the load doesn't exceed the max capacity, UPS can work normally and at the same time keep sending out corresponding warning.

- **CONTROL SYSTEM PARALLEL REDUNDANCY**

Since system has an independent control system itself, UPS module is controlled independently according to the share information. Module can be removed from UPS system if it fails to work, so the damaged module won't do damage to the system.

- **PARALLEL MODULES SHARE BATTERY GROUP**

Modules running in parallel can share the same battery group, so the battery group quantity is reduced. User may install appropriate quantity of battery group according to the anticipated standby time.

- **FREELY SET CHARGE CURRENT**

The system charge current can be setup through LCD. Set appropriate charge current according to the battery capacity in order to charge quickly and avoid battery damage by large current.

- **5 INCH TOUCHSCREEN DISPLAY**

RX-MTR UPS adopts 5 inch touchscreen display with aspect ratio of 9:16. The LCD is compatible with multinational language, provides abundant information such as UPS status, warning information, trouble information, etc. These information can be accessed by pressing the keys beside the LCD screen, also by touching the corresponding text.

- **REMOTE LCD MONITOR(OPTIONAL)**

RX-MTR UPS supports portable LCD monitor, up to 100 meters, so information can be accessed remotely, instantly and conveniently.

- **INTELLIGENT MONITOR FUNCTION**

A local monitor software CD is configured for RX-MTR UPS, UPS is monitored through RS232 conveniently. Remote monitor is feasible when SNMP card or RS485 converter card is chosen.

- **MID OR SMALL ELECTRICITY DISTRIBUTING SYSTEM**

RX-MTR UPS provides abundant components, user can choose some components according to his requirement such as isolating transformer, switchboard and SNMP card to form a mid or small electricity distributing system.

- **COMPATIBLE WITH BOTH TOP AND BOTTOM CABLE ENTRY CONNECTION**

RX-MTR UPS allows user to connect power cables from the top of cabinet or bottom according to the equipment room environment.

- **MAINTAIN BYPASS**

This RX-MTR UPS provides maintenance bypass function.

- **MULTI-PURPOSE UPS**

RX-MTR UPS support frequency conversion.

Technical Specifications:

INPUT	SPECIFICATION	COMMENTS
INPUT VOLTAGE		
Nominal Input AC Voltage	380 V(phase to phase)	
Bypass Voltage Range	323 ~ 437 V(phase to phase)	Static bypass
Input Voltage Range	204 ~ 520 V(phase to phase)	Load ≤ 50%
	242 ~ 520 V(phase to phase)	50% < Load ≤ 70%
	277 ~ 520 V(phase to phase)	70% < Load ≤ 100%
Input Power Factor	> 0.99	8 UPS Modules
Input THDi	< 5 %	Full R/RCD load
INPUT FREQUENCY		
Input Frequency Range	40 ~ 70 Hz	
INPUT CURRENT		
Nominal Current (RMS)	161A	1.8 UPS Modules 2.Vrms=380V 3.Line mode with 130% capacity. 4.Charger not included.
OUTPUT		
OUTPUT POWER		
Output Power	120 kVA/96 kW	8 UPS Modules
Output Power Factor	0.5 to 1	
OUTPUT CHARACTERISTICS		
Nominal Voltage	380 V(phase to phase)	
Nominal Current	182A	8 UPS Modules
Output Voltage Range	372.4 ~ 387.6 V(phase to phase)	
Output Voltage Distortion	< 2 %	100% R LOAD
	< 5 %	Load defined by EN50091-3/ IEC62040-3
Transient Response	±10%	0%~100%~0% load
Load Crest Ratio	3:1	MAX.
OUTPUT FREQUENCY RANGE		
Line Mode	(46~54)Hz / (56~64)Hz	Same as input frequency
Converter mode	(50±0.05)Hz / (60±0.05)Hz	Independent of input frequency
Battery Mode	(50±0.05)Hz / (60±0.05)Hz	
Slew Rate	1 Hz/s	
EFFICIENCY		
Line mode	> 91 %	
Battery mode	> 90%	
OVERLOAD CAPABILITY		
Line mode	10 minutes minimum, then transfer to bypass and alarm	110%<Load≤130%
	1 minute minimum, then transfer to bypass and alarm	130%<Load≤150%
	0.5 seconds minimum then transfer to bypass and alarm	Load≥150%
Battery mode	10 minutes minimum, then turn off output and alarm	110%<Load≤130%
	1 minute minimum, then transfer to bypass and alarm	130%<Load≤150%
	0.5 seconds minimum then turn off output and alarm	Load≥150%

Technical Specifications:

TRANSFER TIME		
Line Mode To Battery Mode	0 ms	
Battery Mode To Line Mode	0 ms	
Bypass Mode to Line Mode	0 ms	
Line Mode To Bypass Mode	0 ms	
BATTERY AND CHARGER		
Nominal battery voltage	± 240 Vdc	
Auto Shutdown Voltage	± 204 Vdc	
Over Voltage Protection	± 320 Vdc	
Floating charge voltage	± 274 Vdc	
Charge power	2kW to 16 kW	8 UPS Modules
Battery discharge current	200 A	8 UPS Modules
Charge time	12 hrs to 90% after full load 2 hrs discharging time	
PARALLEL REDUNDANCY		
Parallel module number	1 to 8	
Redundancy module number	0 to 7	
ENVIRONMENT		
Working Temperature	0°~40°C	
Altitude	<1500m	
Humidity	20%~90%	
Storage Temperature	0°C~40°C	
Acoustic Noise	<58dB	Measure 1 meter in front of UPS (buzzer not included)
SAFETY & EMC STANDARD		
Safety	EN50091-1-1/EN62040-1-1	
ESD	IEC 61000-4-2 Level 3	
Sensitivity of Electricity and Magnetism	IEC 61000-4-3 Level 3	
Voltage Transient Compatibility	IEC 61000-4-4 Level 3	
Surge Disturbance	IEC 61000-4-5 Level 4	
EMI	EN50091-2 (>25A) class A	
MECHANICAL FEATURES		
Dimension		
Outline Dimension	600mm×1000mm×2000mm	width×depth×high
Net Weight		
RACK Net Weight	530 kG	Contain 8 UPS Modules
	250 kG	Contain no module
UPS Module	31 kG	
Color	Black	
INTERFACE AND DISPLAY		
Control panel	LCD display	
Audio alarm	Beep/4sec	Battery Mode
	Beep/2sec	Battery Low
	Continuous	UPS Fault
	Beep/2sec	Over Load
	Beep/2minutes	Bypass
Communication port	DB-9 RS232; DB-9 & RJ45 RS485, SNMP slot	SNMP Card can be selected