



MR Series Modular UPS

30~150kVA

- » All Module Hot-swappable Design
- » Power Factor 1 (kVA=kW)
- » High Efficiency 96%
- » System Parallel
- >> Fault Trace Management
- » Most compact 30KW module 2U



Data centers



Telecom systems



Computer rooms



Financial systems



Precision instruments



Intelligent equipment



MR Series Modular UPS



- Wide input voltage range -60%~+25% with high grid adaptability.
- · High overload capacity.
- Hot-swappable function ensures uninterrupted operations during maintenance.
- Dual system control card and dual DSP control prevents single failure point.
- Intelligent fan control and redundant design for energy saving: 25% load can be driven when 2 fans fail and 50% load when 1 fan fails.
- Flexibile breakers configuration, 4 breakers/1 breaker based on requirement.
- EPO function as standard for immediataly remove power from connected load in the event of emergency.
- Anti-corrosion resistant coating in all PCB boards.
- Cabinet temperature detection and pre-alarm which prevent over temperature accident.



- AC/AC efficiency up to 96% and 30% load up to 95% efficiency reduces heat dissipation and limits power consumption costs
- ECO mode efficiency up to 99% ingives significant cost reduction. W-ECO mode could reach 98.5% efficiency, THDi below 5% and transfer time below 5ms to reduce TCO.
- High input power factor up to 0.99 and low Input THDi: < 2.0% at full load, much less grid pollution and costs
- Advanced and compact 2U height 30KW power module
- Self-load test function, easy debugging and easy onsite test during commissioning, before it is connected the real load, without using costly temporary loads, cabling and breakers for energy saving.
- Advanced power module sleep mode, prolong the service life of power module



- Three level technology, Low harmonic, high efficiency, effectively energy-saving.
- Power walk in function decrease the inrush to mains or generator.
- Advanced parallel expansion technology, support 8 units up to 1.2MW in parallel, single /parallel system compatible.
- Self-dedusting function which save the preventive service time.
- Parallel ECO mode maximum whole system effciency.
- · Common battery bank on parallel mode.
- Frequency converter function(60Hz to 50Hz or 50Hz to 60Hz)
- Lithium Battery compatible.











Self-load Test



- User-friendly ON/OFF Double physical button design to avoid false operation.
- 7-inch touch screen with LED Indicators, ensure comprehensive and visualized information display.
- Large data storage capacity,10000pcs events logs.
- Friendly human-machine interface with data and graphical forms.
- Support software update at site, one time update for all power module and control module.
- ON/OFF Double Button design to prevent misoperation and touch screen failure
- Smart programmable dry contact communication function.
- Main unit display allow to check the information of each parallel
 unit



- Fault Trace Management (FTM) for convenient failure analysis(waveform record before & after of the fault point for 200ms) which easily figure out faulty point.
- 3 stage battery charging system, prolong the service life of batteries
- Intelligent battery management, 28-46 pcs batteries per string allow customers to get the faulty battery out instead of replacing it
- Key components pre-alarm function which precaution the system fault.
- Dedusting function which save the service time and keep system performance.
- Full asset management record the spare parts replacement, timeline and service people.





Fault tracing management



Common battery bank sharing



- Flexible Network Management: SNMP
- Intelligent Battery Monitoring System
- Bypass voltage regulator
- Extended dry contact card
- BMS card for lithium battery
- Energy feedback absorber
- Input and output isolation transformer
- SPD: C Grade
- Output Synchronization Common Bus
- Battery Charge Temperature Compensation



BMS Kit







Externded Dry Contact Kit

Top Cable Kits

SNMP Card

MR Series Modular UPS

Technical Specifications

| MODI | EL | MR33120 | MR33150 |
|------------------------------------|--------------|---|---------------------------|
| Power module Model | | MR3330-J | |
| Input | | | |
| Voltage Range (Vac) | | 304W+PE,380/400/415 L:L 138~485 | |
| Input Wiring | | 3Ph+N+PE | |
| Input Frequency (Hz) | | 40-70 | |
| Bypass Voltage Range (Vac) | | -20%(10/15/30/40/50/60%)~+15%(10/20/25%) | |
| Power Factor | | ≥0.99 | |
| THDi | | ≤2% (linear load, full load); ≤3% (nolinear load, full load) | |
| Output | | | |
| Power Module (kVA) | | 30 | |
| System Capacity (kVA) | | 120 | 150 |
| Power Factor | | 1 | |
| Voltage (Vac) | | 3Ф4W+PE,L-L:380,400,415 ±1% | |
| Frequency (Hz) | | 50/60± 0.2% (battery mode) | |
| Three Phase Difference | | True sine wave, ≤2 degrees | |
| THDv | | ≤1% (linear load, full load); ≤4% (nolinear load, full load) | |
| Static Bypass Transfer Time | | 0 | |
| System Efficiency (MAX) | | 96% | |
| Overload Capacity | | 101-105% Long run, 106-110% load for 60 minutes, 111%-125% load for 10 minutes, | |
| | | 126%-150% load for 1 minute, over 150% load transfer to bypass | |
| Battery | | | |
| Battery Voltage (Vdc)* | | ±192 (±168~±276 settable) | |
| Charging Current (A) | | N×10 Maximum (N = the number of power module) | |
| Others | | | |
| Display | | 7 inch Touch screen+ LED+ Physical buttons | |
| Alarm | | Low battery, abnormal AC input, UPS failure, etc. | |
| Protection | | Low battery, overload, short-circuit and over temperature, etc. | |
| Relative Humidity | | 0~95%, no condensation | |
| Communication Function | | RS232, RS485,Dry contact, | MODBUS, SNMP (optional) |
| Breakers | | input, output, bypass and maintanence bypass switch | maintanence bypass switch |
| Altitude(m) | | 0~2000, no derate | |
| Noise (dB) | | 65 | |
| Storage Temperature (°C) | | -40~70 | |
| Operating Temperature (°C) | | 0~40 | |
| Power Module Dimension (W×D×H)(mm) | | 500×700×86(3U) | |
| Cabinet Dimension(W×D×H)(mm) | | 600×860×2000 | |
| Weight (kg) | Cabinet | 162 148 | |
| | Power Module | 24 | |

• Specification is subject to change without prior notice.

