MTR-RM
Modular Online UPS
40-500kVA
(380V/400V/415V)

Product
The RM series modular, online UPS ranging from 40kVA to 500kVA is designed to protect any critical load for medium and large data center achieving maximum availability. The RM series feature the latest technology of 3-level technology and PFC input control, which guarantees high efficiency of 96% and ultra-reliability. Its compact design ensures power density of 500kVA in one cabinet, 3 units can be paralleled for capacity or redundancy up to 1500kVA, making it an excellent choice for medium and large facilities.

Features
- **Compact design**
  500kVA in one cabinet, footprint less than 1.45m² saving valuable room space
- **High power density**
  50kVA power module in 4U height, easy for capacity expansion
- **High efficiency**
  Advanced 3-level technology guarantees high efficiency operating in double conversion mode up to 96%
- **Intelligent charging management**
  The system intelligently control the whole process of the charging and discharging, effectively improve the life time of the battery
- **High scalability**
  The system can be configured from 40kVA to 500kVA in one single cabinet, 3 units in parallel for a capacity up to 1500kVA
- **Friendly HMI**
  10.4" touch color LCD with graphic display, independent LCD for each power module
- **Smart sleep function**
  System can intelligently shut down some power modules to increase total load rate, achieving higher efficiency
- **Multi communication interface**
  Provide RS232, RS485, USB, SNMP, AS400 and programmable dry contacts
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<th>Model</th>
<th>RM100/50X</th>
<th>RM200/50X</th>
<th>RM300/50X</th>
<th>RM500/50X</th>
<th>RM80/40X</th>
<th>RM1600/40X</th>
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<tr>
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<td>200kVA/200kW</td>
<td>300kVA/300kW</td>
<td>500kVA/500kW</td>
<td>80kVA/80kW</td>
<td>160kVA/160kW</td>
<td>240kVA/240kW</td>
<td>400kVA/400kW</td>
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<td>Power Module</td>
<td>PM50X (50kVA/45kW)</td>
<td>PM40X (40kVA/40kW)</td>
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**Input**
- Grid System: 3 Phases + Neutral + Ground (frame)
- Rated Input Voltage: 380/400/415VAC (Line-Line)
- Rated Frequency: 50/60Hz
- Input Voltage Range: 304~478Vac (Line-Line), full load 228V~304Vac (Line-Line), load decrease linearly according to the min phase voltage
- Input Frequency Range: 40Hz ~ 70Hz
- Input Power Factor: >0.99
- Input Current THDi: <3% (full Linear Load)

**Bypass Input**
- Rated Bypass Voltage: 380/400/415VAC (Line-Line)
- Rated Frequency: 50/60Hz
- Bypass Voltage Range: Selectable, default -20% ~ +15% Up limited: +10%, +15%, +20%, +25%. Down limited: -10%, -15%, -20%, -30%, -40%
- Bypass Frequency Range: Selectable, ±1Hz, ±3Hz, ±5Hz

**Output**
- Rated Inverter Voltage: 380/400/415VAC (Line-Line)
- Rated Frequency: 50/60Hz
- Output Power Factor: 1
- Voltage precision: ±2%
- Transient Response: <5% for step load (20%~80%~20%)
- Transient recovery: <30ms for step load (0%~100%~0%)
- Output Voltage THDu: <1.5% from 0% to 100% linear load, <5.5% full non-linear load according to IEC/EN62040-3
- Inverter Overload: <110%, 60min; 110%~125%, 10min; 125%~150%, 1min; >150%, 200ms
- Frequency Regulation: 50 / 60Hz ±0.1%
- Synchronized Range: Settable, ±0.5Hz ~ ±5Hz, default ±3Hz
- Synchronized Slew Rate: Settable, 0.5Hz/S ~ 3Hz/S, default 0.5Hz/S

**Battery and Charger**
- Battery Rate Voltage: ±240VDC
- Charger Voltage precision: 1%
- Charger Power: max=20%
- Efficiency
  - Normal Operation: >96%
  - Battery Operation: >96%

**System**
- Display: LCD + LED + Touch screen
- Environment
  - Operation Temperature: 0°C ~ 40°C
  - Storage Temperature: 40°C ~ 70°C
  - Relative Humidity: 0 ~ 95%
  - Non-condensing Noise (1 meter): 65dB @ 100% load, 62dB @ 45% load Non-condensing
- Altitude: <1000m, Load derated 1% per 100m from 1000 ~ 2000m

**Physical**
- Dimension (WxDxH) cm: Cabinet 60*98*115, 65*96*160, 65*96*200, 130*110*200, 60*98*115, 65*96*160, 65*96*200, 130*110*200, 51*70*17.8
- Weight: Cabinet 120, 170, 220, 450, 120, 170, 220, 450, 45
- Power module