MST-Pro Series
80 kVA - 500 kVA
Online Double Conversion

Product
MST-Pro series three phase UPS offers advanced technology that increase performance and reliability. Three high speed DSPs with completed digital control fully ensure high quality of power supply. High input power factor makes UPS green energy saving power. It also offers humanization design: full front access of service ability, user-friendly interface.

Features
- Three phase in and out system, compatible with utility of 380/400/415V, 50/60Hz
- Online double conversion, offering load with best power quality
- Support all kinds of load, high overload capability
- Fully digital control with three DSPs including IGBT rectifier, inverter, charger
- Digital circulating current control technology, increasing the parallel reliability
- Wide input voltage window, compatible with different utilities
- Green power technology, high input power factor, low current THD, high efficiency
- Intelligent battery management, extending battery lifetime
- Intelligent self-diagnose function, all kinds of fault protection, large capability of history record storage.
- Full front maintenance, saving space.
- Redundant design of power model fans, increasing the system reliability
- Modularized design of subsystem, convenient field maintenance
- High MTBF (mean time before failure)(>200,000h), low MTTR(mean time to repair)<0.5h
- Large LCD display, friendly human machine interface
- Configured with top and bottom cable connection
- Parallel up to 1,500kVA.
- All kinds of options include main back feed protection, bypass back feed protection, battery leakage protection, battery start kit, output isolation transformer and lighting protection kit.

Application
- ISP (Internet Service Provider)
- IDC (Internet Data Center)
- Computing Center
- Bank
- Server Center
- Precise equipment
<table>
<thead>
<tr>
<th>Model</th>
<th>MST-Pro80</th>
<th>MST-Pro100</th>
<th>MST-Pro150</th>
<th>MST-Pro200</th>
<th>MST-Pro250</th>
<th>MST-Pro300</th>
<th>MST-Pro400</th>
<th>MST-Pro500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Rating</td>
<td>80kVA</td>
<td>100kVA</td>
<td>150kVA</td>
<td>200kVA</td>
<td>250kVA</td>
<td>300kVA</td>
<td>400kVA</td>
<td>500kVA</td>
</tr>
</tbody>
</table>

**Input**

- Grid System: 3 Phases + Neutral + Ground
- Rated Input Voltage: 380/400/415VAC (L-L)
- 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**

- 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

<table>
<thead>
<tr>
<th>Bypass Overload</th>
<th>125%, long time operation 125%&lt; load &lt;130%, last for more than 10 minutes 130%&lt;load&lt;150%, last for more than 1 minutes &gt;150%, last for more than 300ms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>380/400/415VAC (Line-Line)</td>
</tr>
</tbody>
</table>
- Rated Inverter Voltage: 380/400/415VAC (Line-Line)
- Rated Frequency: 50/60Hz
- Output Power Factor: 1
- Voltage precision: ±3%
- Transient Response: <5% for step load (20% - 80% - 20%)
- Transient recovery: <30ms for step load (0% - 100% - 0%)
- Output Voltage THDu: <1% from 0% to 100% linear load, <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±0.01%
- 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% *Output power

**Efficiency**

- Normal Operation: >96%
- Battery Operation: >96%

**System**

- Display: LED+LCD
- Interface: RS232, RS485, USB, Programmable dry contact, battery cold start
- Option: battery cold start, SNMP, AS400, parallel kit, Lightning protection components, Dust Filter, LBS
- Environment

  - Operation Temperature: 0 ~ 40 °C
  - Storage Temperature: 40 ~ 70 °C
  - Relative Humidity: 0 ~ 95% Non condensing
  - Noise (1 meter): 65dB @ 100% load, 62dB @ 45% load
  - Altitude: <1000m, Load derated 1% per 100m From 1000 ~ 2000m

**Physical**

- Dimension (W*H*D,mm): 600*980*1150 600*980*1150 650*960*1600 650*960*1600 650*960*2000 650*960*2000 1300*1100*2000 1300*1100*2000
- Weight (kg): 210 210 305 350 445 490 810 900