Power Xpert 9395 high performance UPS

200–1200 kW

Lowest total cost of ownership in the industry

- Energy Saver System (ESS) provides 99 percent efficiency without compromising reliability, by suspending power modules when double conversion is not required
- Lowers operational costs by delivering up to 97 percent efficiency in double-conversion mode
- Offers maximized efficiency in double conversion down to extremely light loads using Variable Module Management System (VMMS)
- Reduces HVAC costs by producing >33 percent less heat
- With up to 20 percent more power in the same footprint, the resulting 50 kW additional real power allows users to power 100 more servers, allowing for up to $120,000 in additional revenue monthly*
- Delivers 100 percent conditioned, perfect sine-wave output by isolating output power from all input power anomalies
- Eliminates the cost of load bank rentals and minimizes burn-in testing energy costs with the Easy Capacity Test

High reliability and robust manageability

- Provides unity power factor plus capabilities, which allows the UPS to supply the reactive current for non-power factor corrected loads without the need for derating
- When at or below 50–75 percent capacity, the 9395 high performance uninterruptible power modules (UPMs) automatically act as N+1 redundant systems, saving the cost and space required for separate redundant UPS and battery systems
- Handles up to 0.9 leading load power factors without de-rating UPS capacity
- HotSync patented load-sharing technology enables parallel operating of static converters without communication for sync or loadshare signals

Scalability and flexibility

- Number of power modules per UPS can be specified, so capacity can flex to match data center growth
- Layout can be chosen to suit installation, such as back-to-back, L-shaped or integrated into switchgear
- Preferred bypass topology can be centralized or distributed and additional modules can be added as power load increases
- Centralized multi-module paralleled 9395 systems are supported by the Eaton System Bypass Module (SBM)
- More than 90 percent of materials used can be recycled, decreasing end-of-life impact

ESS: How is it different than Eco mode?

- **Instantaneous action:** Less than two milliseconds transition time makes the UPS reaction time invisible to IT loads
- **Inherent surge suppression:** ESS provides transient suppression within the UPS—loads are protected from lightning events, even in ESS
- **Fault discrimination:** In a short circuit condition, the UPS detects the location of a fault (upstream or downstream), and reacts appropriately and instantly to protect the critical load

*Quantified by estimating monthly revenue of $1,200 per server

Eaton

Powering Business Worldwide

An Eaton Green Solution
### Technical specifications:

#### UPS rating (unity power factor 1.0)

<table>
<thead>
<tr>
<th>kVA/kW</th>
<th>200/200</th>
<th>250/250</th>
<th>275/275</th>
<th>300/300</th>
<th>300/400</th>
<th>400/400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>480V</td>
<td>600/575</td>
<td>400/415</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage range</td>
<td>+10% / -15%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>45–65 Hz</td>
<td></td>
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</tr>
</tbody>
</table>

#### General characteristics

- **Efficiency**: 99% in Energy Saver System (ESS) (up to 97% (480V) and 98% (600V and 400V) in double-conversion)
- **Parallel capability**: 4 UPS units maximum for distributed bypass and 8 UPS units maximum with SBM
- **Max modules per size**: Up to 3 modules, 600 kW
- **Audible noise**: 75dBA @ 1 meter
- **Altitude (max)**: 1000m at 40 degree C (104 degree F) when UPM capacity is above 275 kW field upgrade module

#### Input characteristics

- **Voltage**: 480V standard, 600/575V and 400/415V optional
- **Voltage range**: +10% / -15%
- **Frequency range**: 45–65 Hz
- **Power factor**: 0.99 (minimum)
- **Input current distortion**: <3% (no input filter required)
- **Soft start capability**: Yes
- **Internal backfeed protection**: Yes

#### Output characteristics

- **Voltage**: 480V standard, 600/575V and 400/415V optional
- **Regulation**: ±1%
- **Inverter**: PWM with IGBT switching
- **Voltage THD**: <2% (100% linear load); <5% (non-linear load)
- **Load power factor range**: Up to a 0.9 power factor leading without derating
- **Overload**: 110% for 10 minutes, 125% for 2 minutes, 150% for 15 seconds

#### Battery

- **Battery types**: VRLA, AGM, wet cell, lithium-ion
- **Battery voltage**: 480V
- **Temperature compensation**: Optional
- **Charging method**: ABM technology or float, selectable

#### Dimensions and weights (480V and 400V* system)

<table>
<thead>
<tr>
<th>Dimensions and weight</th>
<th>480V</th>
<th>400V</th>
</tr>
</thead>
<tbody>
<tr>
<td>200, 250, 275, 300 kW</td>
<td>52.5&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>2150 lb (975 kg)</td>
</tr>
<tr>
<td>200-300 kW redundant</td>
<td>73.8&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>3184 lb (1447 kg)</td>
</tr>
<tr>
<td>Field upgrade module, 300 kW</td>
<td>29&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>1307 lb (470 kg)</td>
</tr>
<tr>
<td>400, 500, 550, 600 kW</td>
<td>73.8&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>3184 lb (1447 kg)</td>
</tr>
<tr>
<td>400-600 kW redundant</td>
<td>103&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>4211 lb (1918 kg)</td>
</tr>
<tr>
<td>675, 750, 825, 900 kW</td>
<td>141&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>5236 lb (2375 kg)</td>
</tr>
<tr>
<td>675, 750, 825, 900 kW</td>
<td>170.5&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>5623 lb (2859 kg)</td>
</tr>
<tr>
<td>1000, 1100, 1200 kW</td>
<td>170.5&quot; w x 34.4&quot; d x 74&quot; h</td>
<td>6523 lb (2959 kg)</td>
</tr>
</tbody>
</table>

#### Options

- **External maintenance bypass**: Standard
- **Remote monitor panel**: Color touchscreen
- **Remote inputs/outputs**: Eight backlit status indicator lamps plus an audible horn
- **PredictPulse™ remote monitoring and management service**: A monitoring and management subscription service that collects and analyzes data from connected power infrastructure devices, providing Eaton with the insight needed to make recommendations and take action on your behalf. PredictPulse is included with the 9395 high performance UPS for the first year at no-charge along with a PXGX-UPS card and Environmental Monitoring Probe (connectivity parts are required).

#### Communications

- **Communications cards**: Four communication bays standard. The following connectivity options can be installed at any time:
  - PXGX-UPS card (included with PredictPulse activation)
  - ModBus RTU card
  - AS/400 Relay card
  - Industrial Relay card
  - Powerware HotSync CAN Bridge card
  - Environmental Monitoring Probe (included)
  - BACnet IP communication protocol supported

- **Remote inputs/outputs**: Five building alarm inputs and one summary alarm contact (5A @ 120V) standard
- **Remote monitor panel**: Eight backlit status indicator lamps plus an audible horn

#### Notes:

- 480V and 400V are 275 kW UPM max capacity.