Smart-UPS VT

10/15/20/30/40 kVA — Three-phase compact, high-performance power protection with scalable runtime

apc.com
Smart-UPS VT offers centralized three-phase power protection with the reliability of the award-winning Smart-UPS family. Ideal for small data centers, large retail stores, regional offices, and dense power requirements, the Smart-UPS VT includes dual-mains input, automatic and maintenance bypasses, and scalable runtime with swappable batteries for increased availability. The rack-mounted version maximizes valuable floor space by incorporating UPS, power distribution, and additional battery capacity in a single rack. Low cost of ownership is achieved through best-in-class efficiency and a reduction in rating of electrical infrastructure — wires, transformers, and generators — due to the Smart-UPS VT Soft Start feature. The APC by Schneider Electric network management card with temperature monitoring provides remote monitoring and management through a simple Web/SNMP interface and allows integration with StruxureWare. Serviceability is greatly enhanced by user-replaceable batteries, manageable extended run frames, included start-up, and standard on-site warranty services. All these features make the Smart-UPS VT the easiest UPS in its class to deploy, manage, and maintain.

High availability
The Smart-UPS VT includes dual-mains inputs, automatic and maintenance bypasses, and scalable runtime with swappable batteries that are quick and easy to replace for increased availability.

Its compatibility with the market-leading remote management applications, coupled with an intuitive LCD user interface and LED status indicators, ensures the utmost availability for business-critical applications.

A versatile product
The Smart-UPS VT is available in a wide choice of configurations to best fit each specific installation need:

- **10/15/20/30/40 kVA**
- **Three different enclosures, from classic wide to rack-mounted versions**
- **Flexible runtime capacity:**
  - With quick-swappable batteries and extended run enclosures
  - With up to four internal battery strings and external extended runtime enclosures
- **Compatibility with generators, transformers, etc.**

Reduced total cost of ownership
Smart-UPS VT intelligent design leads to a significant reduction of the total cost of ownership and makes it the ideal choice over time.

- **High efficiency in class (96%)**
- **Small footprint**
- **Scalable runtime**
- **Parallel capable**
- **Network manageability**
Smart-UPS VT offers the ability to parallel up to four UPS units for redundancy.

Wall-mounted parallel maintenance bypass

High performance
- Up to 96% efficiency even at low load levels
- Large input voltage tolerance for compatibility with low-quality power grids
- Low input/output signal distortion
- Parallel capability up to four units for redundant configurations or capacity extension

Comprehensive services offering
The product design allows quick maintenance leading to higher availability for the load.
- On-site audits
- Maintenance contracts
- Battery replacement
- Remote monitoring for maximized uptime

Easy maintenance
The product design allows quick maintenance in case of failure, leading to higher availability for the load.
- Slide-in/out concept for the power module for a quick comeback to normal state
- Quick-swappable batteries for quick and easy replacement

Manageability
The built-in features of the Smart-UPS VT, combined with APC leading management solutions, make it easy to manage and monitor proactively. This significantly improves control over the energy supply and ensures high availability for the loads.
- Remote management of the UPS over network or telephone lines
- Centralized management via StruxureWare

Options
Smart-UPS VT product offering provides a list of options.
- Modbus/J-Bus capability
- Remote management with environmental monitoring
- Dry-contact management
- Service bypass panel, floor mounted
- Service bypass panel with distribution panel
- Empty frames for batteries and transformers
- One-year repair or replace with factory authorized start-up

StruxureWare for Data Centers software suite
Schneider Electric™ UPS units and secure power systems are a core component of any architecture designed for highly critical applications, such as data centers, industry environments, infrastructure, and buildings.

Intelligent energy management of these systems is enabled by Schneider Electric EcoStruxure™ integrated hardware and software system architecture. StruxureWare software applications and suites are a key element of the EcoStruxure architecture. StruxureWare software helps maximize system reliability and optimize operational efficiency.

StruxureWare for Data Centers software collects and manages real-time information about assets, resource use, and operation status throughout the data center life cycle. This data center infrastructure management software fully integrates the Galaxy™ PW. With full system visibility, managers can monitor and apply this information in order to optimize data center performance to meet IT-, business-, and service-oriented goals.

StruxureWare for Data Centers software suite
A comprehensive portfolio of services

Schneider Electric Critical Power & Cooling Services provides the highest quality services and solutions by trained and trusted professionals. Our world-class services offer a smart way to build, operate, and maintain your critical applications, ensuring the right people, in the right place, at the right time.

Assembly and start-up service

Assembly and start-up service by a certified Field Service Engineer (FSE) ensures full factory warranty coverage. A Schneider Electric certified installation ensures your equipment is properly and safely configured for optimal performance. This service features a standard eight-hour five-day response time, with upgrades available for off-business hours.

Advantage plans

Flexible service packages offer hassle-free system maintenance to improve uptime at a predictable cost. These packages provide your system with the care it needs to operate most efficiently while minimizing downtime. The Advantage Plus, Prime, Ultra, and Max are full-service packages that include technical support, preventive maintenance, quick on-site response, and remote monitoring. Response time upgrades are available.

Remote Monitoring Service (RMS)

RMS is an economical and easy-to-use Web-based service that lets you quickly respond to environmental or system changes. Trained technicians provide 24-hour monitoring of your physical infrastructure to diagnose and resolve problems before they become critical.

Preventive maintenance

Preventive maintenance on-site examinations of your critical systems are designed to prevent problems before they occur and keep your system running at maximum efficiency.

On-site warranty extension service

In the event of a system issue, an FSE will arrive on site by the next business day to isolate, diagnose, and correct the problem in as little time as possible, minimizing downtime. Upgrades to even faster response times are available.

Technical specifications

<table>
<thead>
<tr>
<th>UPS rating kVA/kW (PF = 0.8)</th>
<th>5/6</th>
<th>15/12</th>
<th>20/16</th>
<th>30/24</th>
<th>40/32</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC power supply input</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input voltage (V)</td>
<td>400 V (three-phase)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency (Hz)</td>
<td>47 – 70 Hz (auto-sensing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power factor</td>
<td>&lt; 0.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input current total harmonic distortion</td>
<td>Less than 5% for full load</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Output</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output voltage (V)</td>
<td>400 V (three-phase)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency (Hz)</td>
<td>47 – 53 Hz (for 50 Hz nominal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power factor</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Overload</td>
<td>150% one minute, 125% 10 minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output voltage total harmonic distortion</td>
<td>Less than 3.5% for full load</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency (at full load)</td>
<td>94.0%</td>
<td>95.5%</td>
<td>96.4%</td>
<td>96.1%</td>
<td>96.5%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 – 40 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paralleling</td>
<td>Up to four units for capacity or redundancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (H x W x D) mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wide tower</td>
<td>1,500 x 523 x 854</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow tower (30/40 kVA)</td>
<td>1,500 x 352 x 854</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enclosure (no integrated batteries)</td>
<td>823 x 352 x 854</td>
<td>823 x 523 x 854</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audible noise (dB(A))</td>
<td>64 dB (57 dB at 70% load)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 °C to 40 °C (32 °F to 104 °F)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating relative humidity</td>
<td>0 to 95%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Storage temperature</td>
<td>55 °C to 45 °C</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage elevation</td>
<td>0 – 15,000 meters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>64 dB (57 dB at 70% load)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage elevation</td>
<td>0 – 15,000 meters</td>
<td></td>
<td></td>
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<td></td>
</tr>
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