Marine Smart-UPS On-line
Efficient and reliable uninterruptible power supplies for most demanding shipboard environments.
apc.com/marine
Marine Smart-UPS On-Line
5 and 6 kVA/kW 230 V

APC™ by Schneider Electric Marine Smart-UPS™ On-Line offers high-density, double-conversion on-line power protection with scalable runtime, ideal for providing uninterrupted power in critical marine applications.

Applications: Bridge, navigation, radio communication, automation, computing, networking equipment, S.O.L.A.S., GMDSS, ECDIS, and wherever clean, uninterrupted power is needed.

S.O.L.A.S., VDR, Public address systems

Network and server protection

Navigation and transmission systems

Propulsion and automation systems

Sound, lighting, and entertainment

DNV type approval
Temperature Class A
Enclosure Class A
Vibration Class A
Humidity Class A
EMC Class B
Marine Smart-UPS On-Line
5 and 6 kVA/kW 230 V

Industry-leading power factor minimizing UPS footprint.

Standard features

Best-in-class power density
More real power in watts, 0.9 pf on 5 kVA, Unity on 6 kVA models.

High-efficiency “Green Mode”
Achieves 98% efficiency, which saves utility and cooling costs without compromising performance or reliability.

Graphical LCD display with multicolor backlight
Intuitive interface provides detailed and accurate information with ability to configure locally.

Intelligent battery management
Temperature-compensated charging extends life and advanced algorithms recommend replacement date. The UPS can inform the user which batteries need to be replaced and auto detect when additional battery packs are added.

Built-in energy meter
Measures energy use and displays UPS efficiency in various modes of operation for easy energy tracking.

Operate without battery
Ability to immediately protect equipment when power returns.

Frequency 50 Hz< – >60 Hz conversion
Can convert 50 Hz to 60 Hz and 60 Hz to 50 Hz.

Power factor corrected input
The UPS input power factor is always 1 regardless of the load’s power factor.

Hot swappable batteries
No tools are necessary to replace the batteries on the run.

Three-year warranty on electronics
Additional year of warranty protection for electronics provides peace of mind.
Marine Smart-UPS On-Line
5 and 6 kVA/kW 230 V

Proven performance with the world’s largest installed base of single-phase, double-conversion products.

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Additional features

Embedded network management card with environmental monitoring
Remote monitoring and control of the UPS and the environment via Ethernet connection while freeing up the SmartSlot™ so customers can add accessories for additional communication options

Preinstalled dry contact I/O SmartSlot card AP9613
- UPS status presented via 6 fully isolated output relays, expandable to 8 with the optional accessory AP9810
- UPS control via 4 opto-isolated input contacts, expandable to 8 with an optional accessory AP9810

Emergency power off (EPO)
- Remote UPS shutoff in the event of a fire or other emergency. The UPS can accept normally open (NO) or normally closed (NC) contacts

Switched outlet group(s)
Ability to control a group of output load receptacles independent from the main UPS. Enables:
- Rebooting hung device without cycling the entire UPS
- Sequenced turn ON/OFF
- Shedding of noncritical loads based on a variety of parameters (battery time, runtime remaining, and overload)
- Scheduled time OFF to conserve energy

Communication ports
Serial, USB, Ethernet, and SmartSlot for network accessory cards

Communication protocols
Modbus Serial, USB power summary, HTTP, SNMP, and Telnet
Marine Smart-UPS On-Line
5 and 6 kVA/kW 230 V

Intuitive, easy-to-use LCD provides clear and accurate information in multiple languages.

Standard features

- **LCD display screen**
  Accurately provides real-time status updates in your choice of basic or advanced menus.

- **UPS status (scrolling)**
  - Output voltage
  - Input voltage
  - Output frequency
  - Runtime
  - Load
  - Battery health

- **Control**
  - UPS and outlet group settings
  - Bypass control

- **Configuration**
  - Output voltage, frequency
  - Language, brightness, contrast
  - Alarm volume
  - IP address

- **Test and diagnostics**
  - Initiate battery and runtime calibration tests

- **About**
  - UPS serial number, battery part number
  - Battery install and suggested replacement dates

Seven available languages make it easy for a multinational crew to configure and operate
- English
- French
- Italian
- German
- Spanish
- Russian
- Portuguese

Backlight screens
- Amber: Indication of condition that requires attention
- Red: Indication of UPS alarm that requires immediate attention
# Marine Smart-UPS On-Line

## 5 and 6 kVA/kW 230 V

### Product accessories

<table>
<thead>
<tr>
<th>Management cards</th>
<th>Rail kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP9620: Legacy Communication SmartSlot card</td>
<td>SRTRK2: APC Smart-UPS SRT 19 in. rail kit for Smart-UPS SRT 5/6/8/10 kVA</td>
</tr>
<tr>
<td>AP9622: Modbus/Jbus interface card</td>
<td>SRTRK3: APC 2-post mounting rail kit for Smart-UPS SRT</td>
</tr>
<tr>
<td>AP9635: UPS network management card with environmental monitoring, out-of-band access, and modbus</td>
<td>Backplate kit</td>
</tr>
<tr>
<td>AP9335TH: APC temperature and humidity sensor</td>
<td>SRT001: APC Smart-UPS SRT 5 kVA output HW kit</td>
</tr>
<tr>
<td>AP9810: APC dry contact I/O Expansion Accessory</td>
<td>Transformers</td>
</tr>
<tr>
<td>AP9624: UPS interface expander</td>
<td>SRTR002: APC Smart-UPS RT 5,000 VA 230 V isolation transformer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Battery packs</th>
<th>Service bypass panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRT192RMBPM: Extended run battery pack for 5 and 6 kVA Marine UPS</td>
<td>SBP6KRMI2U: APC service bypass panel 230 V, 50 A; MBB; hardwire input; (4) IEC-320 C19 output</td>
</tr>
<tr>
<td>SRT002: APC Smart-UPS SRT 15 ft. extension cable for 192 VDC external battery packs 5/6 kVA UPS</td>
<td></td>
</tr>
<tr>
<td>SRT001: APC Smart-UPS SRT 5 kVA output HW kit</td>
<td></td>
</tr>
<tr>
<td>APCRBC140</td>
<td></td>
</tr>
</tbody>
</table>

- **Management cards**
- **Battery packs**
- **Rail kits**
- **Backplate kit**
- **Transformers**
- **Service bypass panels**

- Secure tower bolt down vibration isolation kit SRT10BDVK enables secure UPS and battery pack installation on the deck.
- IP23 enclosure SRT10IP23 provides water ingress protection for UPS and battery packs.
- Marine filter SRT6RMM ensures conducted electromagnetic compliance per IEC60945/IACS E10/DNV-GL.
Marine Smart-UPS On-Line

Other members of the product line

Marine filter
The SURT023M filter ensures conducted electromagnetic compliance per IEC60945/IACS E10/DNV-GL for 1 – 3 kVA Marine Smart-UPS On-Line

Please visit www.apc.com/marine for further product information and specifications

Marine UPS
APC Marine Smart-UPS On-Line 1 – 3 kVA
SURT1000XLIM
SURTD2200XLIM
SURTD3000XLIM

Schneider Electric global marine service

Schneider Electric global marine service support program
- Provides 24/7 online support
- Offers to dedicated customers onboard capabilities and spares at key sea ports
- Improves fleets’ operation efficiency on all shipping routes
- Reduces drastically customer’s number of services providers

Operation
- Capabilities adapted to your needs
- “Online” or “on-site” support
- Extended warranty, maintenance contracts
- All necessary spare parts to fit your equipment

Retrofit
- Adaptation and upgrading solution

DNV type approval
Temperature Class A
Enclosure Class A
Vibration Class A
Humidity Class A
EMC Class B
## Technical specifications

<table>
<thead>
<tr>
<th>Product feature/product sku#</th>
<th>SRT5KRMXLIM</th>
<th>SRT6KRMXLIM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input: Output phase configuration</td>
<td>1:1</td>
<td></td>
</tr>
<tr>
<td>Input power feed</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td>Power rating; derate 1.67%/°C above 40 °C</td>
<td>5 kVA/4.5 kW</td>
<td>6 kVA/6 kW</td>
</tr>
<tr>
<td>Power factor: Input/output</td>
<td>1.0/0.9</td>
<td>1.0/1.0</td>
</tr>
<tr>
<td>Efficiency: Online/green mode</td>
<td>94%/98%</td>
<td></td>
</tr>
<tr>
<td><strong>Output characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal output voltage</td>
<td>230 V (220, 240 V user selectable)</td>
<td></td>
</tr>
<tr>
<td>Output frequency</td>
<td>Factory default: 50/60 Hz ± 3 Hz (auto sense); 50 or 60 Hz ± 0.1 Hz user selectable</td>
<td></td>
</tr>
<tr>
<td>Generator compatibility</td>
<td>Fast sync slew rate for generator synchronization</td>
<td></td>
</tr>
<tr>
<td>Overload capability (% and duration)</td>
<td>Up to 105%: no limit; 125%: 1 min; 150% 30 sec; &gt;175%, short circuit 500 msec</td>
<td></td>
</tr>
<tr>
<td>Output connection</td>
<td>(6) IEC 320 C13, (4) IEC 320 C19, Hardware (requires an optional SRT001 for SRT5KRMXLIM)</td>
<td></td>
</tr>
<tr>
<td>Switched outlet groups</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Input characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input voltage nominal</td>
<td>220, 230, 240 V</td>
<td></td>
</tr>
<tr>
<td>Input voltage range at full/half load, 40 °C</td>
<td>160 – 275 V/100 – 275 V</td>
<td></td>
</tr>
<tr>
<td>Input voltage range at full/half load, 55 °C</td>
<td>180 – 275 V/112 – 275 V</td>
<td></td>
</tr>
<tr>
<td>Input frequency range</td>
<td>40 – 70 Hz</td>
<td></td>
</tr>
<tr>
<td>Input connection</td>
<td>Hardware (1Ph+N+G), (2Ph+G)</td>
<td></td>
</tr>
<tr>
<td><strong>Battery</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery type</td>
<td>Maintenance-free, sealed, valve-regulated lead acid with suspended electrolyte, leak proof</td>
<td></td>
</tr>
<tr>
<td>Charging time (reach 90% after full discharge)</td>
<td>&lt; 1.5 hours (internal batteries only)</td>
<td></td>
</tr>
<tr>
<td>Extended runtime</td>
<td>Yes, up to 10 external battery packs with full feature support</td>
<td></td>
</tr>
<tr>
<td>Hot swappable batteries</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Communication section and user interface</strong></td>
<td>RJ-45 Serial (also simple signaling, remote on/off), USB, RJ-45 Ethernet, RJ45 temperature/humidity probe</td>
<td>RJ-45 Serial (also simple signaling, remote on/off), USB, RJ-45 Ethernet, RJ45 temperature/humidity probe</td>
</tr>
<tr>
<td>Communication ports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry contact relay outputs</td>
<td>6 fully isolated output relays (expandable to 8 by optional accessory SKU# AP9810)</td>
<td></td>
</tr>
<tr>
<td>Dry contact relay inputs</td>
<td>4 opto-isolated inputs (expandable by 4 additional (non opto-isolated) with an optional SKU# AP9810)</td>
<td></td>
</tr>
<tr>
<td>EPO NO/NC</td>
<td>Yes, screw terminals; NC or NO</td>
<td></td>
</tr>
<tr>
<td>Cold start/EPO reset</td>
<td>Yes (Use on/off switch on display)</td>
<td></td>
</tr>
<tr>
<td>Firmware upgradable</td>
<td>Yes — via FW upgrade wizard or NMC</td>
<td></td>
</tr>
<tr>
<td><strong>Physical section</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rack height</td>
<td>3 U</td>
<td>4 U</td>
</tr>
<tr>
<td>Tower, (w x h x d), mm</td>
<td>130 x 432 x 719</td>
<td>174 x 432 x 719</td>
</tr>
<tr>
<td>Weight net, kg</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td><strong>Regulatory compliance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory compliance</td>
<td>DNV-GL 2.4, IEC60945, IACS E10, IEC 62040-1, IEC 62040-2, IEC 62040-3 (VFI-SS-111), IEC 62040-4, IEC62430, VDE, EAC, CE, RCM, KCC</td>
<td></td>
</tr>
<tr>
<td><strong>Runtime, min., at half/full load</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPS internal batteries only</td>
<td>12/4</td>
<td>9/3</td>
</tr>
<tr>
<td>1 battery pack</td>
<td>48/21</td>
<td>36/16</td>
</tr>
<tr>
<td>2 battery packs</td>
<td>83/38</td>
<td>65/29</td>
</tr>
<tr>
<td>3 battery packs</td>
<td>121/56</td>
<td>96/44</td>
</tr>
<tr>
<td>4 battery packs</td>
<td>160/75</td>
<td>127/57</td>
</tr>
</tbody>
</table>