

# Smart-UPS On-Line

1 – 20 kVA

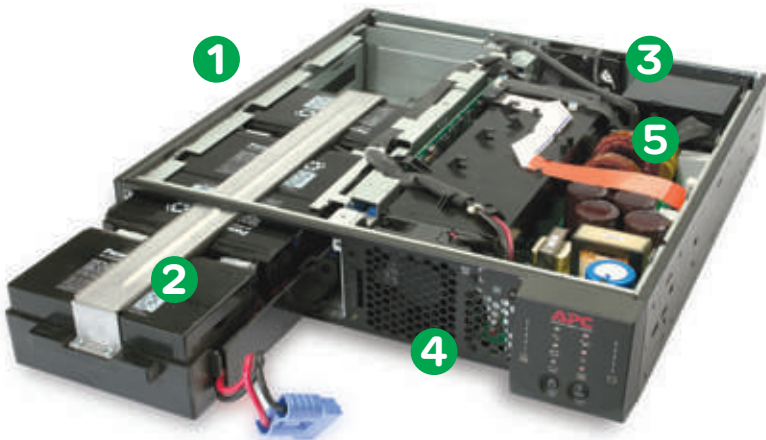
High-density, double-conversion online power protection with scalable runtime



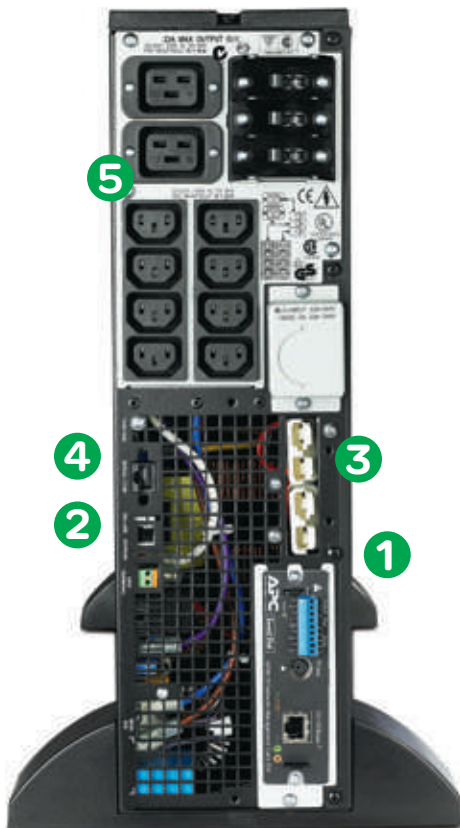
## A versatile UPS developed for unstable power conditions worldwide.

Smart-UPS™ On-Line provides high-density, true double-conversion online power protection for servers, voice/data networks, medical labs, and light industrial applications. Capable of supporting loads from 1 to 20 kVA in a rack/tower convertible form, the Smart-UPS On-Line is available from 2 U to 12 U. The 15 kVA and 20 kVA models enable support of power-hungry blade servers or heavily loaded equipment racks. When business-critical systems require runtime in hours, not minutes, Smart-UPS On-Line can be configured with matching battery packs to comply with aggressive runtime demands. The included PowerChute™ management software provides unattended graceful shutdown of network operating systems. All models 5 kVA and above include an integrated network management card for remote management (optional on models below 5 kVA). The entire Smart-UPS On-Line family provides value to customers with demanding power conditions, including a very wide input voltage window, extremely tight output voltage regulation, frequency regulation, internal bypass, and input power factor correction.

# Features and benefits



- 1 Rack/tower convertible**  
Ensures integration in various environments
- 2 Hot-swappable/user-replaceable batteries**  
Ensures continuous operation of the load even when the batteries are being replaced
- 3 Double-conversion online**  
Provides tight voltage and frequency regulation and zero transfer time for reactive loads (machinery, lab equipment, etc.)
- 4 Advanced 16-segment LED display**  
Quickly understand unit and power status with visual indicators (LCD on 15 – 20 kVA models)
- 5 Frequency and voltage regulation**  
Gives higher application availability by correcting poor frequency and voltage conditions without using the battery



- 1 UPS Network Management Card with Environmental Monitoring**  
Provides remote user interface, managed via web browser, SNMP, and Telnet. Includes graceful unattended shutdown. The UPS Network Management Card is pre-installed on UPS models 5 kVA through 20 kVA
- 2 Serial connectivity**  
Enables quick and easy configuration of the UPS
- 3 Scalable runtime**  
Allows additional runtime to be quickly added as needed
- 4 Built-in automatic and manual bypass**  
Ensures seamless power to the load even in the event of catastrophic UPS failure
- 5 Field-replaceable power distribution panels**  
Enables quick in-field modification of output receptacles to fit changing needs

## Product accessories

### Management cards

AP9610: Relay I/O SmartSlot™ Card  
(not compatible with SURTD UPS models)

AP9622: Modbus®/Jbus Interface Card  
(not compatible with SURTD UPS models)

AP9630: UPS Network Management Card

AP9631: UPS Network Management Card with  
Environmental Monitoring

AP9810: APC™ by Schneider Electric™ Dry  
Contact I/O Accessory (not compatible with  
SURTD UPS models)

AP9620: Legacy Communications SmartSlot Card  
(compatible with SURTD UPS models only)

### Transformers

APTF10KW01: APC WW 10 kVA Isolation  
Transformer

APTF20KW01: APC WW 20 kVA Isolation  
Transformer

SURT001: APC Smart-UPS RT 3000 VA 230 V  
Isolation Transformer

SURT002: APC Smart-UPS RT 5000 VA 230 V  
Isolation Transformer

### Backplate kits

SURT007: APC Smart-UPS RT 3/5/6 kVA Input/  
Output Hardwire Kit

SYPD10: Symmetra™ RM 230 V Backplate Kit with  
(2) IEC 320 C19 and (1) IEC 60309

### Other

SURT013: SURT Equipment Cart

### Rail kits

SURTRK: APC Smart-UPS RT 482 mm Rail Kit 1 kVA  
and 2 kVA

SURTRK2: APC Smart-UPS RT 482 mm Rail Kit  
for Smart-UPS RT 3/5/6/8/10 kVA

SURTRK4: APC Smart-UPS RT 482 mm Rail Kit  
for Smart-UPS RT 15/20 kVA

### Battery packs

SURT48XLBP: APC Smart-UPS RT 48 V  
Battery Pack

SURT48RMXLBP: APC Smart-UPS RT 48 V  
RM Battery Pack

SURT192XLBP: APC Smart-UPS RT 192 V  
Battery Pack

SURT192RMXLBP: APC Smart-UPS RT 192 V  
RM Battery Pack

SURT192RMXLBP2: APC Smart-UPS RT 192 V  
RM Battery Pack 2 Rows

### Service bypass panels

SBP3000: APC Service Bypass Panel 100 – 240 V;  
30 A; BBM; Hardwire Input/Output

SBP6KRMI2U: APC Service Bypass Panel 230 V;  
50 A; MBB; Hardwire Input; (4) IEC 320 C19 Output

SBP10KRMI4U: APC Service Bypass Panel 230 V;  
100 A; MBB; Hardwire Input; IEC 320 Output (8)  
C13 (2) C19

SBP20KP: APC Service Bypass Panel  
200/208/230/240 V 125 A HW Input/Output

SBP20KRMI4U: APC Service Bypass Panel 230 V  
125 A HW Input IEC 320 Output (8) C19



## A comprehensive portfolio of services

Schneider Electric Critical Power & Cooling Services (CPCS) provides the expertise, services, and support you need for your building, industry, power, or data center infrastructure. Our world-class life cycle services offer a smart way to install and maintain your critical applications, ensuring your systems are always running at peak performance.

## Technical specifications

| UPS VA                               | 1000   | 2000                             | 3000     | 5000   | 6000      | 8000  | 10000     | 15000   | 20000 |
|--------------------------------------|--|----------------------------------|----------|--|-----------|---|-----------|---|-------|
| <b>Output</b>                        |  |                                  |          |  |           |   |           |   |       |
| Topology                             | Double-conversion online   |                                  |          |  |           |   |           |   |       |
| Nominal output voltage               | Configurable for 220 : 230 or 240 nominal output voltage                         |                                  |          |  |           |   |           | Configurable for 220 : 230 : 240 : 400 V nominal output voltage                     |       |
| Efficiency at full load              | Up to 92%  |                                  |          |  |           |   |           |   |       |
| Output frequency (sync to mains)     | 50/60 Hz +/- 3 Hz user adjustable  |                                  |          |  |           |   |           |   |       |
| Output power capacity                | 700 W  | 1400 W                           | 2100 W   | 3500 W                                       | 4200 W    | 6400 W  | 8000 W    | 12 kW   | 16 kW |
| Output connections                   | (6) IEC 320 C13  | (8) IEC 320 C13; (2) IEC 320 C19 |          |  |           | (1) Hardwire 3-wire (H + N + G); (4) IEC 320 C13; (4) IEC 320 C19 |           | (1) Hardwire 3-wire (H + N + G); (1) Hardwire 5-wire (3PH + N + G); (8) IEC 320 C19 |       |
| <b>Input</b>                         |  |                                  |          |  |           |   |           |   |       |
| Nominal input voltage                | 230 V  |                                  |          |  |           | 230 V or 400 V  |           |   |       |
| Input frequency                      | 45 – 65 Hz (auto sensing)  |                                  |          |  |           |   |           |   |       |
| Input connections                    | British BS1363A; IEC 320 C20; Schuko CEE 7/EU1-16P                               |                                  |          | Hardwire 3-wire (1PH + N + G)                |           | Hardwire 3-wire (1PH + N + G); Hardwire 5-wire (3PH + N + G)      |           |   |       |
| Bypass                               | Automatic and Manual (Built-in)  |                                  |          |  |           |   |           |   |       |
| <b>Battery</b>                       |  |                                  |          |  |           |   |           |   |       |
| Battery type                         | Maintenance-free sealed lead-acid battery with suspended electrolyte: leak proof |                                  |          |  |           |   |           |   |       |
| Replacement battery                  | RBC31  |                                  |          | RBC44  |           |   |           |   |       |
| Runtime                              | See Chart Below  |                                  |          |  |           |   |           |   |       |
| <b>Communications and Management</b> |  |                                  |          |  |           |   |           |   |       |
| Interface port(s)                    | DB-9 RS-232, SmartSlot, USB  |                                  |          | RJ-45 10/100 Base-T, RJ-45 Serial, SmartSlot |           |   |           |   |       |
| Pre-installed SmartSlot card         | –  | –                                | –        | AP9631                                       |           |   |           |   |       |
| Emergency power off (EPO)            | No   |                                  |          | Yes  |           |   |           |   |       |
| Control panel                        | LEDs   |                                  |          |  |           |   |           | LCD Display   |       |
| <b>Physical</b>                      |  |                                  |          |  |           |   |           |   |       |
| Rack height                          | 2 U  |                                  | 3 U      |  |           | 6 U   |           | 12 U  |       |
| Maximum height                       | 432 mm   |                                  |          |  |           |   |           | 533 mm  |       |
| Maximum width                        | 85 mm  |                                  | 130 mm   |  | 263 mm    |   | 432 mm    |   |       |
| Maximum depth                        | 483 mm   |                                  | 660 mm   |  | 736 mm    |   | 773 mm    |   |       |
| Net weight                           | 25.00 kg   |                                  | 54.55 kg |  | 110.91 kg |   | 247.70 kg |   |       |

## Runtime estimates at half and full load (minutes)

| UPS VA           | 1000    | 2000    | 3000    | 5000    | 6000   | 8000   | 10000  | 15000  | 20000  |
|------------------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| Internal         | 32/14   | 17/6    | 34/14   | 18/6    | 16/5   | 20/7   | 15/5   | 22/8   | 15/5   |
| (1) Battery pack | 122/69  | 67/30   | 122/57  | 70/31   | 49/21  | 48/21  | 37/15  | 53/23  | 38/15  |
| (2) Battery pack | 257/129 | 121/56  | 217/102 | 125/58  | 88/40  | 76/35  | 60/26  | 84/38  | 60/27  |
| (3) Battery pack | 360/180 | 177/83  | 315/150 | 183/85  | 130/60 | 106/49 | 83/38  | 117/54 | 85/38  |
| (4) Battery pack | 480/240 | 234/110 | 416/199 | 242/113 | 172/80 | 136/63 | 107/49 | 150/69 | 104/50 |