

# Smart-UPS On-Line

1 – 20 kVA

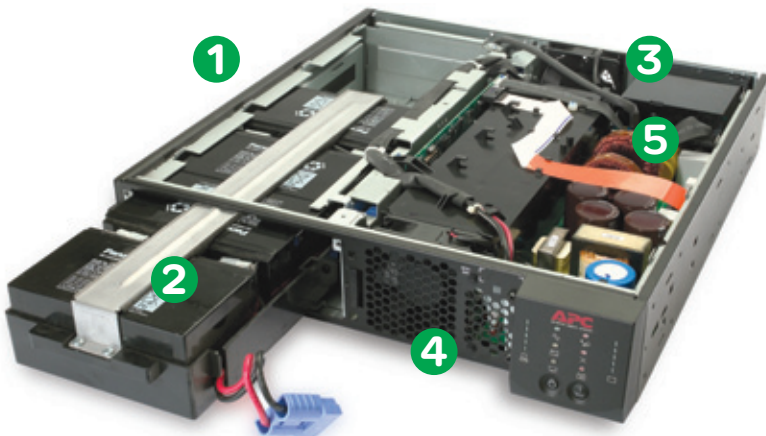
High-density, double-conversion online power protection with scalable runtime



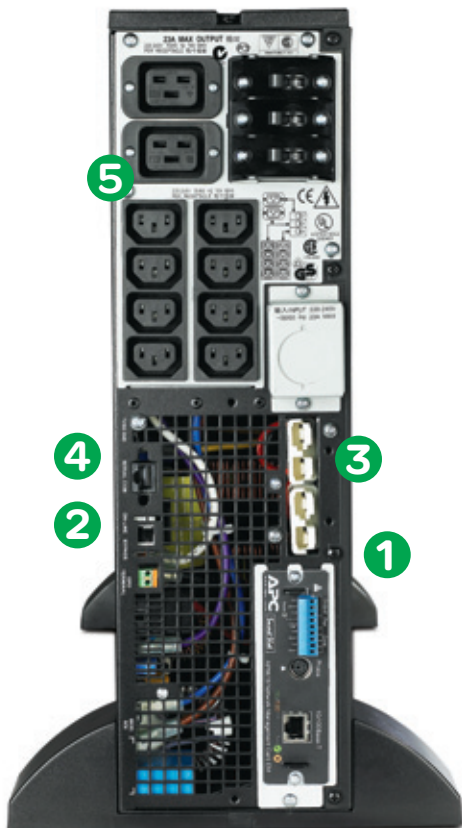
## A versatile UPS developed for unstable power conditions worldwide.

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