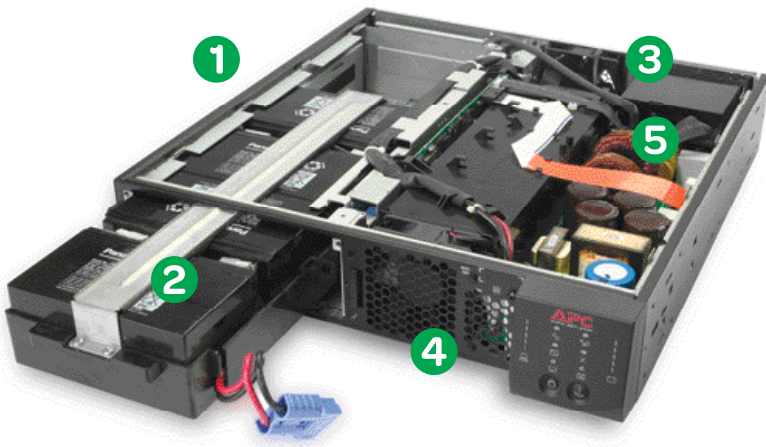# Smart-UPS On-Line

1.5-20 kVA

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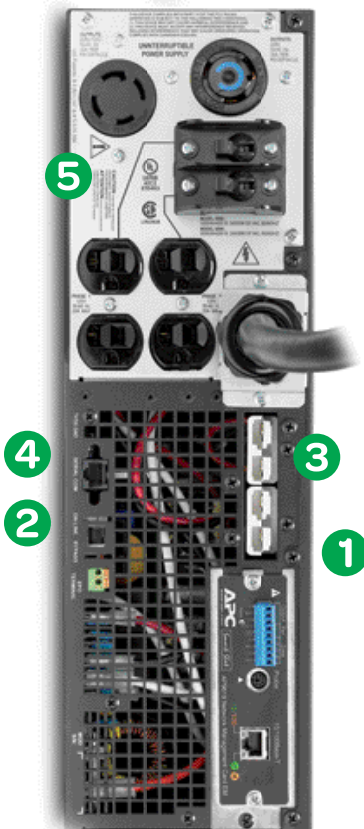power protection with scalable runtime.

A versatile UPS developed for the harshest power conditions in the world.

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 2U to 12U. Recent family extensions at 15 and 20 kVA 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 environments, including very wide input voltage window, extremely tight output voltage regulation, frequency regulation, internal bypass, and input power factor correction.

APC™

by Schneider Electric

Features and Benefits

① Rack/Tower Convertible
Ensures integration in various environments

② Hot-swap/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, Manage via Web Browser, SNMP, and Telnet. Includes graceful unattended shutdown.

② Serial Connectivity
Enables quick and easy configuration of the UPS.

③ Scalable Runtime
Allows additional run time 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
Enable quick in-field modification of output receptacles to fit changing needs.

Product Accessories

Management Cards
AP9610: Relay I/O SmartSlot™ Card

AP9622: Modbus™/Jbus Interface Card

AP9630: UPS Network Management Card

AP9631: UPS Network Management Card with Environmental Monitoring

AP9810: APC™ Dry Contact I/O Accessory

Transformers
APTF10KW01: APC WW 10 kVA Isolation Transformer

APTF20KW01: APC WW 20 kVA Isolation Transformer

AP9626: APC Step-Down Transformer RM 2U 208V IN 120V OUT; with 5-20 Receptacles

AP9627: APC Step-Down Transformer RM 2U 208V IN 120V OUT; with L5-20 Receptacles

SURT003: APC Smart-UPS RT Tower Isolation/Step-Down Transformer 5000VA 208/120V

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

SURT009: APC Smart-UPS RT 3000VA, 100-120VAC, Output Hardwire Kit

SURT011: APC Smart-UPS RT 208V 3000/5000VA Backplate Kit with (2) 6-20R and (1) L6-30R

SURT012: APC Smart-UPS RT 208V 7.5/10 kVA Backplate Kit with (2) 6-20R and (2) L6-30R

SURT014: APC Smart-UPS RT 5/6 kVA 120V PDU KIT with (6) NEMA 5-20

SURT015: APC Smart-UPS RT 5/6 kVA 208V PDU KIT with (3) NEMA L6-20

SURT016: APC Smart-UPS RT 5/6 kVA 120V/208V PDU KIT with (1) L14-30 and (2) L5-20

SURT017: APC Smart-UPS RT 5/6 kVA 208V PDU KIT with (2) L6-30

SURT018: APC Smart-UPS RT 5/6 kVA Input/Output Hardwire Kit

SURTPD1: APC Smart-UPS RT 15/20 kVA 200-240V PDU with (8) IEC320 C13 and (2) IEC320 C19

SURTPD2: APC Smart-UPS RT 15/20 kVA 200-240V PDU with (4) IEC320 C19

SYPD3: APC Symmetra™ RM and LX 208/240V Backplate Kit with (2) L6-20R and (1) L6-30R

SYPD7: APC Symmetra RM and LX 208V/240V Backplate Kit with (3) L6-20R

SYPD11: APC Symmetra RM and LX 208/240V Backplate Kit with (2) L6-30R

Other
SURT013: SURT Equipment Cart

Rail Kits
SURTRK: APC Smart-UPS RT 19" Rail Kit 1-2.2 kVA

SURTRK2: APC Smart-UPS RT 19" Rail Kit for Smart-UPS RT 3/5/6/8/10 kVA

SURTRK4: APC Smart-UPS RT 19" Rail Kit for Smart-UPS RT 15/20 kVA

Battery Packs
SURTA48XLBP: APC Smart-UPS RT 48V Battery Pack

SURTA48RMXLBP2U: APC Smart-UPS RT 48V RM Battery Pack

SURT192XLBP: APC Smart-UPS RT 192V Battery Pack

SURT192RMXLBP3U: APC Smart-UPS RT 192V RM Battery Pack

SURT192RMXLBP2: APC Smart-UPS RT192V RM Battery Pack 2 Rows

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

SBP6KRMT2U: APC Service Bypass Panel 200/208/240V; 50A; MBB; L6-30P/HW Input; (1) L6-30R (2) L6-20R Output

SBP10KRMT4U: APC Service Bypass Panel 200/208/240V; 100A; MBB; Hardwire Input; (3) L6-30R (3) L6-20R Output

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

SBP20KRMT4U: APC Service Bypass Panel 200/208/240V 125A HW Input (2) L6-30R (4) L6-20R Output

Technical Specifications

UPS VA	1500	2200	3000	5000	6000	8000	10000	15000	20000
Output									
Topology	Double Conversion On-Line								
Nominal Output Voltage	120V		120/208V	208V					
Efficiency at Full Load	Up to 92%								
Output Frequency (sync to mains)	50/60 Hz +/- 3 Hz user adjustable								
Output Power Capacity	1050W	1600W	2100W	3500W	4200W	6400W	8000W	12kW	16kW
Output Connections	(6) NEMA 5-15R	(6) NEMA 5-15R	(6) NEMA 5-15R; (2) NEMA 5-20R	(2) NEMA L6-20R; (2) NEMA L6-30R	(2) NEMA L6-20R; (2) NEMA L6-30R	(1) Hardwire 3-wire (2PH + G); (2) NEMA L6-20R; (2) NEMA L6-30R		(1) Hardwire 3-wire (2PH + G); (4) NEMA L6-20R; (2) NEMA L6-30R	
Input									
Nominal Input Voltage	120V		120/208V	Configurable for 208 or 240 nominal output voltage					
Input Frequency	45-65 Hz (auto sensing)								
Input Connections	5-15P	5-20P	L5-30/ L6-30P	L6-30P		Hardwire 3-wire (2PH + G)			
Bypass	Automatic and Manual (Built In)								
Battery									
Battery Type	Maintenance-free sealed lead-acid battery with suspended electrolyte: leak proof								
Replacement Battery	RBC57		RBC44						
Runtime	See Chart Below								
Communications and Management									
Interface Port(s)	DB-9 RS-232, SmartSlot, USB		RJ-45 10/100 Base-T, RJ-45 Serial, SmartSlot						
Emergency Power Off (EPO)	Yes								
Control panel	LEDs							LCD Display	
Physical									
Rack Height	2U		3U			6U		12U	
Maximum Height	17.00 inches							20.98 inches	
Maximum Width	3.35 inches		5.10 inches			10.35 inches		17 inches	
Maximum Depth	22.00 inches		26.00 inches			29 inches		30.42 inches	
Net Weight	60.50 lbs.		120 lbs.			244 lbs.		545 lbs.	

Runtime Estimates at Half and Full Load (minutes)

UPS VA	1500	2200	3000	5000	6000	8000	10000	15000	20000
Internal	29/12	17/6	34/14	18/6	16/5	20/7	15/5	22/8	15/5
(1) Battery Pack	109/49	67/30	122/57	70/31	49/21	48/21	37/15	53/23	38/15
(2) Battery Pack	187/89	121/56	217/102	125/58	88/40	76/35	60/26	84/38	60/27
(3) Battery Pack	271/131	177/83	315/150	183/85	130/60	106/49	83/38	117/54	85/38
(4) Battery Pack	358/174	234/110	416/199	242/113	172/80	136/63	107/49	150/69	104/50