

APC™

DIN Rail – Control Panel Mounting Uninterruptible Power Supply

Catalog
2014



Introduction, description	4
Specifications	5
References	6
Dimensions	7
Wiring diagrams	8
Product reference index	9



SUA500

SUA500 Uninterruptible power supply

While everyone expects continuous power from their utilities, the power quality may be less than desirable – especially at peak demand. Issues that may arise during these times may include:

- Sag (undervoltage)
- Swell or surge (overvoltage)
- Transients

Power transmission can also be interrupted by:

- Weather conditions – spikes caused by lightning strikes or power outages caused by downed power lines
- Accidents
- Construction

All of the above conditions can cause issues with industrial processes and manufacturing, as well as with any solid state or microprocessor-controlled equipment.

Uninterruptible power supplies (UPS) can provide relief from many of the above conditions. UPS devices generally provide:

- Voltage regulation
- Noise filters
- Up to 30 minutes of battery backup, depending on power draw

The **SUA500** series of DIN Rail mount devices is a reliable, flexible, and cost effective UPS for control panels. Some of the features which make this desirable for control panels include:

- All of the interfaces are on the front of the device, for easy access.
- Form factor is ideal for DIN Rail mount or direct mount in panels.
- Management cards are available for remote UPS management.
- Several communications options are available.
- Battery can be mounted remotely from the UPS. It can even be mounted externally from the enclosure.
- Network communication cards are available.
- Suitable for either DIN Rail or panel mounting.

APC™ UPS

DIN Rail – Control panel mounting

SUA500

Technical specifications				
Type of UPS		SUA500PDR-S (standard battery)	SUA500PDRI-S (standard battery)	
Conformity to standards		SUA500PDR-H (high temperature battery)	SUA500PDRI-H (high temperature battery)	
Certifications		cUL Recognized UL 1778, CE, VDE		
Input	Nominal Input Voltage	V	120	
	Input Voltage Range	Vac	82–144	
	Input Frequency	Hz	45 - 65; Auto-Selecting	
	Input Connections	Hardwired Input (3-Wire; H-N-G)		
Output	Nominal Output Capacity	500 VA / 325 W		
	Topology	Line Interactive		
	Waveform	Sine wave		
	Nominal Output Voltage	V	120	
	Output Frequency	Hz	50/60 +/- 3; Sync to mains	
	Efficiency (Full-Load)	>94%		
	Output Voltage Distortion (Full Load)	<2% (100% Linear Load); <8% (100% Non-Linear Load)		
	Output Connections	Hardwired Output (3-Wire; H-N-G)		
	Protection	Surge Energy Rating	Joules	540
		Filtering	Full time multi-pole noise filtering; 0.3% IEEE surge let-through; zero clamping response time; meets UL 1449	
Thermal Protection		Yes		
Communications and Controls	Serial Port	DB9; UPS Status, and Control of User Configurable Parameters		
	SmartSlot	SmartSlot Accessories; AP9630 and AP9631 Network Cards, AP9613 Relay I/O Card, AP9622 Modbus Card		
	Emergency Power Off (EPO)	Terminal Block		
	Front Display Panel Buttons	On/Off, Self-Test, Alarm Silence, Cold-Start		
Visual and Audible Status Indicators	LEDs	On-Line, On-Battery, Overload, Replace Battery; and Load and Battery Bar-Graphs		
	Audible Alarm	On-Battery, Low-Battery, Overload		
Environment	Operating Temperature / Humidity	°F (°C)	+32 to 104 (0 to 40) / 0–95% (Non-Condensing) (with Standard Battery) (-S SKUs)	
	Storage Temperature / Humidity	°F (°C)	+32 to 122 (0 to 50) / 0–95% (Non-Condensing) (with High-Temp Battery) (-H SKUs)	
	Mounting	Panel or DIN Rail Mounting		
Battery Cartridge		APCRBC135	APCRBC136	
Battery	Battery Type	Maintenance-Free, Sealed Lead Acid Battery		
	Nominal Battery Voltage	Vdc	24	
	Runtime (Full Load)	8.5 Minutes		
	Recharge Time (To 90%)	<3 Hours		
	Expected Battery Life	3 To 5 Years at 68 °F (20 °C)		
Physical	Dimensions (H x W x D)	in. (mm)	4.22 x 4.20 x 5.65 (107 x 107 x 144)	
	Net Weight	lb (kg)	10.3 (4.68)	
Environment	Operating Temperature / Humidity	°F (°C)	+32 to 122 (0 to 50) / 0–95% (Non-Condensing)	
	Storage Temperature / Humidity	°F (°C)	+5 to 113 (-15 to 45) / 0–95% (Non-Condensing)	

APC™ UPS

DIN Rail – Control panel mounting

SUA500



SUA500PDRS

UPS			
Input voltage	Battery type	Reference	Weight lbs (kg) (1)
120	Standard	SUA500PDRS	18 (8.18)
120	High temperature	SUA500PDRH	18 (8.18)
230	Standard	SUA500PDRIS	18 (8.18)
230	High temperature	SUA500PDRIH	18 (8.18)

Note: SUA500 devices above are shipped with a battery shipped separately.

(1) Weight indicated is for the UPS unit only and does not include the weight of the battery.



APCRBC135

Replacement batteries		
Battery type	Reference	Weight lbs (kg)
Standard	APCRBC135	10.30 (4.68)
High temperature	APCRBC136	7.26 (3.30)

Note: The batteries above are for replacement only; SUA500 devices are shipped with a battery shipped separately.



AP9630

Smart Slot accessories		
Card type and description	Reference	Weight lbs (kg)
Dry Contact I/O Smart Slot Card: Interface expanders and other options for increased UPS monitoring and control functionality. Includes USB cable.	AP9613	0.88 (0.40)
Modbus™/Jbus Interface Card: Interface expanders and other options for increased UPS monitoring and control functionality.	AP9622	0.99 (0.45)
UPS Network Management Card: For remote monitoring and control of an individual UPS by connecting it directly to the network via Ethernet. Includes software.	AP9630	0.75 (0.34)
UPS Network Management Card with Environmental Monitoring: For remote monitoring and control of an individual UPS by connecting it directly to the network via Ethernet. Includes software and temperature sensor.	AP9631	0.75 (0.34)

Note: These smart slot accessories will function in all of the SUA500 UPS devices. Only one card may be used per UPS.



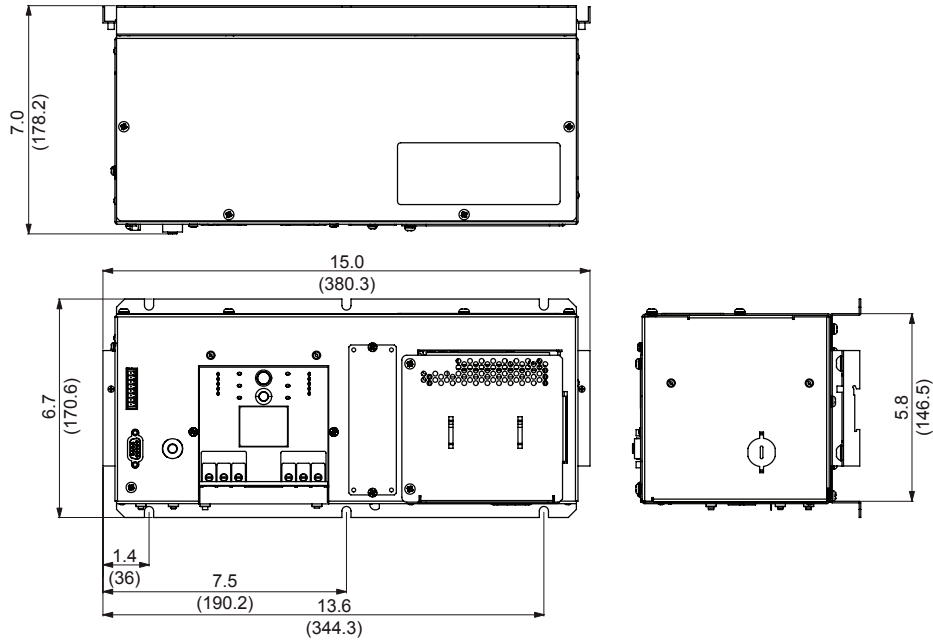
AP9335T

Sensors for use with AP9631 Network Management Card		
Sensor type	Reference	Weight lbs (kg)
Temperature	AP9335T	0.31 (0.14)
Temperature and humidity	AP9335TH	0.40 (0.18)

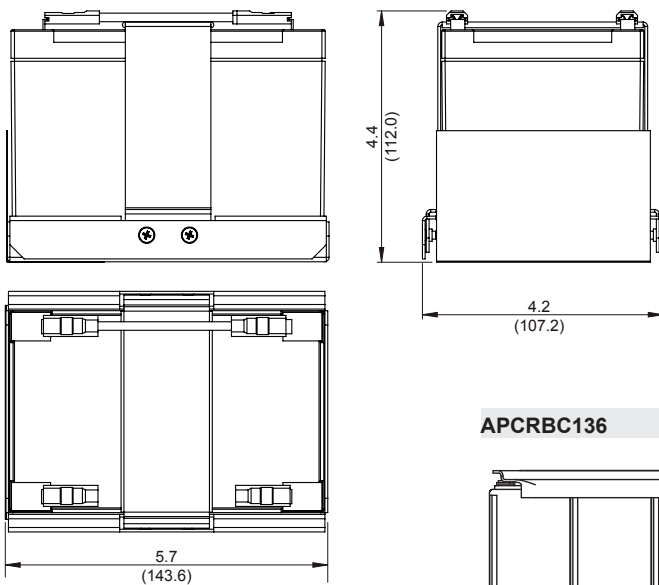
Note: An AP9335T temperature sensor is included with the AP9631 network management card.

Dimensions

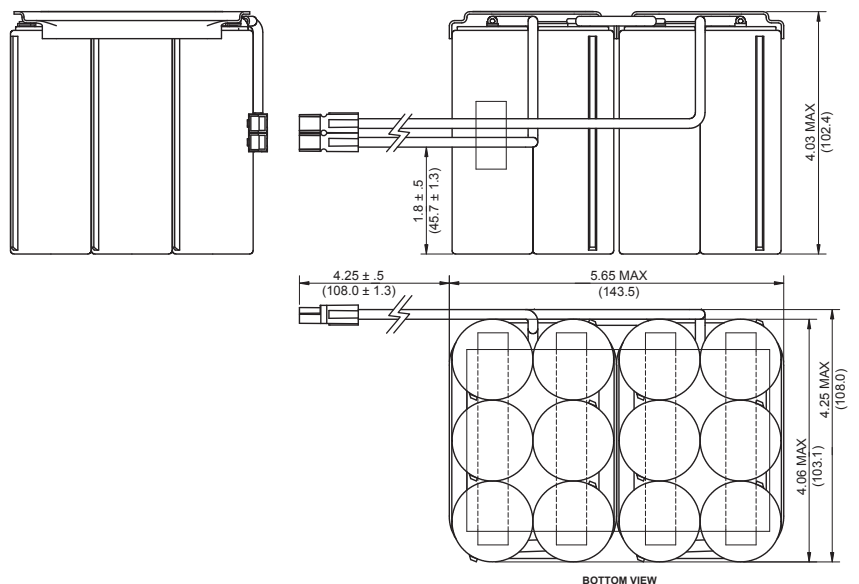
SUA500●●●●●



APCRBC135

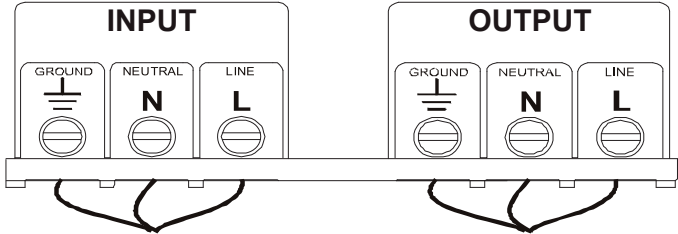


APCRBC136

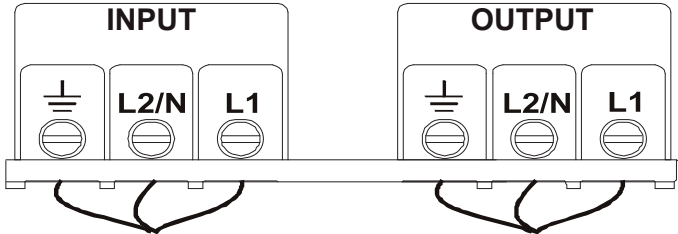


Dual Dimensions: Inches (Millimeters)

Wiring diagrams



120 V models



208/230 V models

A	
AP9335T	6
AP9335TH	6
AP9613	6
AP9622	6
AP9630	6
AP9631	6
APCRBC135	6
APCRBC136	6
S	
SUA500PDRS	6
SUA500PDRH	6
SUA500PDRIS	6
SUA500PDRIH	6

<http://www.schneider-electric.com>

Schneider Electric USA, Inc.

8001 Knightdale Blvd.
Knightdale, NC 27545

USA Customer Care Center
Tel: 888-778-2733

Schneider Electric Canada

5985 McLaughlin Rd.
Mississauga, Ontario, Canada L5R 1B8

Canada Customer Care Center
Tel: 800-565-6699

The information and dimensions in this catalog are provided for the convenience of our customers. While this information is believed to be accurate, Schneider Electric reserves the right to make updates and changes without prior notification and assumes no liability for any errors or omissions.

Modbus, Schneider Electric and logo, and "Make the most of your energy" are trademarks or registered trademarks of Schneider Electric or its affiliates in the United States and other countries. Other trademarks used herein are the property of their respective owners.

Design: Schneider Electric
Photos: Schneider Electric