AP-S2ORT



20A AC Power Distribution Spike Suppressor with Remote Activation





KEY FEATURES

- 9 Total Outlets
 - 6 Rear Panel Switched Outlets
 - 2 Rear Panel Unswitched Outlets
 - 1 Front Panel Unswitched Convenience Outlet
- Remote Activation via Latched Dry Contact Closure or DC Voltage
- Remote Status LED Power Terminals
- · Rear Mounted Remote Activation Bypass Switch
- EPD (Emergency Power Down) to Incorporate With Fire Control Panels
- EVS (Extreme Voltage Shutdown) Clamping Spike & Surge Suppression Circuitry
- RFI Noise Filtering to Reduce Radio Frequency Interference
- EMI Filtering to Reduce Electromagnetic Interference
- Circuit Breaker Protection @ 20A
- Front Mounted USB Charger/Light Port
- Rear Mounted XLR Connector For 12VDC LED Lamp (AP-GNL18) (Lamp Sold Separately)
- Spike Suppression Up To 6000V
- AC Fault Indicator

APPLICATIONS

The flexible AP-S20RT was designed with features to be used in a variety of applications. The AP-S20RT can be used solely for protection against voltage surges or for AC distribution. The AP-S20RT can also be used for power conditioning to eliminate or reduce fuzzy video or frequency audio static pops. The following are just a few examples of applications where the AP-S20RT can be used:

- Restaurants
- Houses of Worship
- Schools
- Home Theaters
- Office Buildings
- Sports Bars

GENERAL DESCRIPTION

The AP-S20RT has been designed to meet most installation requirements for AC power distribution and equipment power protection. The AP-S20RT features noise filtering for unwanted Radio Frequency Interference (RFI) that is commonly introduced into AC lines by nearby radio transmitters or wireless products. EMI filters are incorporated to reduce noise and Electromagnetic Interference (EMI) from such items as electric motors and external switching power supplies.

Unstable AC Mains voltage is one of the main reasons for equipment failure. The amount of energy that can be injected into the power system can be immense with voltages reaching 6kV or amperage peaks of 3000A. The AP-S20RT's circuitry is very fast and can suppress unwanted energy within a nanosecond response and sustain the suppression up to 2 milliseconds. If damage to the suppression circuitry occurs, the AC fault LED will illuminate.

By utilizing the Remote Activation feature, up to 20A of clean electrical power can be switched On or Off with a simple latched dry contact closure. With the closure of the remote activation switch, 12VDC at 100mA is available to power a remote status LED.

An Emergency Power Down function, or EPD, can also be created by using the Remote Activation feature by simply keeping the Remote Activation contact closed until a condition occurs that requires a system shut down. When the contacts are opened, it will remove power from the switched outlets to protect equipment. A rear mounted bypass switch disables the Remote Activation should the need arise.

The AP-S20RT incorporates EVS (Extreme Voltage Shutdown) to remove AC power from devices plugged into the switched outlets in the event of unsafe high or low voltage conditions. A convenient front panel LED indicates if shutdown has occurred.



SPECIFICATIONS

Type Power Conditioner & Suppressor

Load Rating 20A

Safety Listings ETL (UL 60065 Standard)

Front Panel

Outlets 1 Unswitched

USB Port 1 USB Charge/Light Port (5VDC, 1A)

Activation Switch Rocker

Circuit Breaker 20A Resettable

Indicators AC Power On, AC Fault, EVS Protect

Rear Panel

AC Outlets 8 Outlets Total

LED Light Socket XLR Socket to Provide 12VDC for

Optional AP-GNL18 Gooseneck Lamp

LED Light Switch Two position (On / Off)

Remote Activation Latching Type Dry Contact Closure or

5V-24VDC

Remote Activation Connector 4 Position 3.5mm Phoenix Type

Connection

AC Mains Power Cord 9' (2.74m), 12 Gauge, 20A Male AC

Plug

Technical Data

Current Rating 20 Amps

Operating Voltage 102VAC - 132VAC

Power Consumption 8 Watts

Min. Spike Clamping Voltage 460VRMS @ 3,000A

Max. Spike Clamping Voltage 6000V

Max. Spike Clamping Resp. 1 Nanosecond

Time

Spike Clamping Voltage 1250Vp for 20µs

@ 100A

Maximum Surge Current 6,500A
Energy Rating @ 2ms 600 Joules

Noise Attenuation RFI 10dB @ 10kHz / 40dB @ 100kHz /

100dB @ 10MHz

EVS Limits 95VAC Low, 140VAC High, Auto Reset

Temperature Range 5° – 35°C

Humidity Range 5% to 95% Relative Humidity

Mechanical

Chassis Finish Black

Mounting Rack Mount, 1 RU

Height 1.75" (1RU, 44.5mm)

Width 19" (482.6mm)

Depth 8" (203mm)

Weight 5.5 lbs (2.49kg)

ARCHITECT & ENGINEER SPECIFICATIONS

Power conditioner shall be AtlasIED model AP-S20RT. Power conditioner shall have 9 total outlets: 8 rear panel outlets (6 switched and 2 unswitched) and 1 front panel, unswitched outlet. Power conditioner shall include Radio Frequency Interference (RFI) and Electromagnetic Interference (RMI) filtering to reduce noise in AC lines. Power conditioner shall be able to automatically shut down outlets during Extreme Voltage events when the voltage is above 132VAC or below 101VAC. Power conditioner shall have circuit breaker protection at 20A. Unit shall also include remote activation circuitry to be used with remote push button or key switch via contact closure on the rear panel. Power conditioner shall include a 24VDC 2000mA output via rear panel Phoenix connector. Front panel shall include Power, AC Fault, and EVS Protect LED indicators. Integrated 5VDC USB charge/light port shall be included in front panel and rear shall have an XLR connection for use with a 12VDC LED lamp. Finish shall be textured black epoxy and dimensions shall be 19"W x 8"D x 1.75"H (482.6mm x 203mm x 44.5mm) to mount into 1RU of space.

