

# COMPAC® 20A Surge Suppressor hardwired

## Description

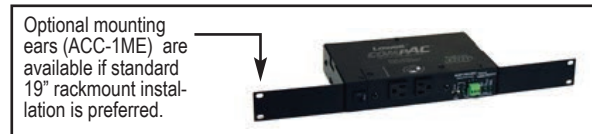
The COMPAC® advanced surge suppressor provides the highest current capacity available in devices of its size to protect multiple pieces of sensitive electronic equipment on a single circuit. It features industrial strength “zero failure” technology backed by a ten year warranty. It also includes a patented\* rotating outlet plate that makes it easy to change the position of the outlets from top to side access. The compact body has a very low profile (1.75”H x 6”D x 9”W) and includes two mounting brackets to promote easy installation — on a wall behind a flat panel TV, under a counter, in a rack or just about anywhere. Terminates to 6-ft. non-metallic flexible whip that can be field-cut to shorter lengths.

- Model No. **ACSP-2002-HW**: features (2) 20A outlets (1 duplex)
- Model No. **ACSP-2002-VTE-HW**: features (2) 20A outlets (1 duplex) and VTE over/under protection that automatically turns receptacles off when line voltage drops below 100V or rises above 140V.
- Model No. **ACSP-2002-RPC-HW**: features (2) 20A outlets and remote power control capability by a low voltage sequencer, switch or control system that provides a maintained dry contact closure.
- Model No. **ACSP-2002-IG-HW**: features (2) 20A insulated ground outlets (1 duplex).
- Model No. **ACSP-2002-IG-VTE-HW**: features (2) 20A insulated ground outlets (1 duplex) and VTE over/under protection that automatically turns receptacles off when line voltage drops below 100V or rises above 140V.
- Model No. **ACSP-2002-IG-RPC-HW**: features (2) 20A insulated ground outlets and remote power control capability by a low voltage sequencer, switch or control system that provides a maintained dry contact closure.
- Model No. **ACSP-2002-GTF-HW**: features (2) 20A insulated ground outlets (1 duplex) plus a ground transient filter. The patented GTF technology filters potentially damaging electromagnetic transients/noise on the ground wire. The GTF installs in series with the ground line of electrical circuits to attenuate high frequency transients without impeding 60Hz fault current. It introduces less than 0.1 ohm at 60Hz to the ground circuit thereby assuring proper operation of any and all overcurrent protection devices (circuit breakers, fuses, etc.). The GTF provides significant attenuation at higher frequencies where the most damaging transients exist. At 1MHz, for example, the GTF attenuates ground noise by 25dB which can be the difference between a sensitive system functioning continuously or having an interruption or “reset” occurrence.



ACSP-2002-HW  
 All versions of the 20A hardwired COMPAC include 6-ft. non-metallic flexible whip and mounting brackets.

\*US Patent No. D535178S



Optional mounting ears (ACC-1ME) are available if standard 19” rackmount installation is preferred.

## Features

- ETL Listed, ANSI C62.41 Compliant, conforms to UL1449-3
- Low-profile chassis (1.75”H x 6”D x 9”W)
- Rotating outlet plate that rotates 90° for front or side access.
- LEDs provide visual system status
- Suppresses line to neutral with no ground contamination.
- TCR® technology defeats surges up to 72,000 amps with zero failures
- Two mounting brackets allow versatile installation. (Optional mounting ears are available if standard 19” rackmount installation is preferred.)
- Terminates to 6-ft. non-metallic flexible whip
- 10 year warranty

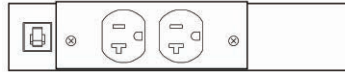
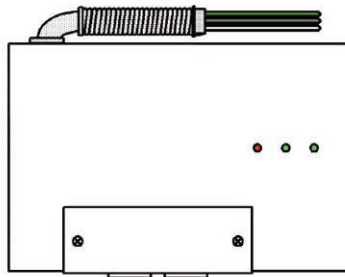
## A & E Specifications

The 20A single-circuit surge suppressor shall be Lowell Model \_\_\_\_ with one duplex outlet. It shall be ETL Listed and conform to UL1449-3. It shall meet ANSI C62.41 and protect line to neutral without ground wire contamination. It shall be capable of protecting electronic equipment from transient voltages, spikes and surges up to 72,000 amps and have a response time of less than 5 nanoseconds. It shall surface or rear rackmount using mounting brackets and include outlets mounted on a plate that can be rotated 90° for front or side access. It shall include LEDs for visual ground verification and surge diagnostics. [Model \_\_\_\_ shall include insulated ground outlets. Model \_\_\_\_ shall include automatic over/under voltage shutdown protection when voltage drops below 100V or rises above 140V. Model \_\_\_\_ shall include remote power control capability (by a low voltage sequencer, switch or control system that provides a maintained dry contact closure). Model \_\_\_\_ shall include a ground transient filter.]

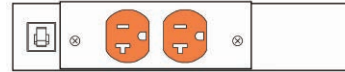
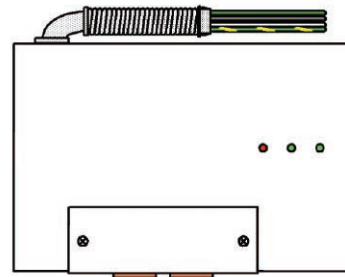
Model No.	Description	Outlets	Amperage	Termination	GTF	Over/Under Protection	Remote Control Capable
ACSP-2002-HW	COMPAC surge suppressor	2 (1 duplex)	20A	hardwired	No	No	No
ACSP-2002-VTE-HW	COMPAC surge suppressor	2 (1 duplex)	20A	hardwired	No	Yes	No
ACSP-2002-RPC-HW	COMPAC surge suppressor	2 (1 duplex)	20A	hardwired	No	No	Yes
ACSP-2002-IG-HW	COMPAC surge suppressor	2-IG (1 duplex)	20A	hardwired	No	No	No
ACSP-2002-IG-VTE-HW	COMPAC surge suppressor	2-IG (1 duplex)	20A	hardwired	No	Yes	No
ACSP-2002-IG-RPC-HW	COMPAC surge suppressor	2-IG (1 duplex)	20A	hardwired	No	No	Yes
ACSP-2002-GTF-HW	COMPAC surge suppressor	2 (1 duplex)	20A	hardwired	Yes	No	No
ACC-1ME	Mounting Ears (1-pr)						

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## Top / Front Panel Layout



ACSP-2002-HW

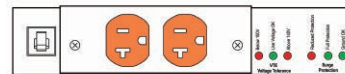


All versions of the 20A hard-wired COMPAC include 6-ft. non-metallic flexible whip and mounting brackets.

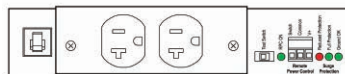
ACSP-2002-IG-HW



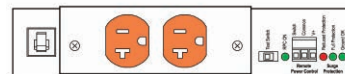
ACSP-2002-VTE-HW



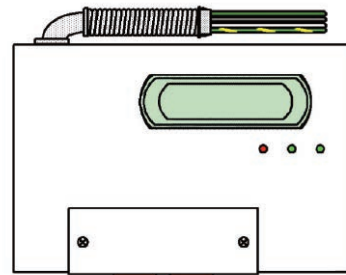
ACSP-2002-IG-VTE-HW



ACSP-2002-RPC-HW



ACSP-2002-IG-RPC-HW



ACSP-2002-GTF-HW

### Performance Specifications:

Operating Voltage/Current:	120VAC / 20A, 60Hz
Maximum Surge Current:	72,000A (exceeds UL1449-3 6000V, 3000A)
Initial Clamping Voltage:	205V, UL rating 400V
Endurance:	IEEE C62.41-1991, B3 (C1), Pulses (lifetime): 1kv≥1,000,000; 3kv≥100,000; 6kv≥5000
Transient Noise Reduction:	29dB@100kHz, 70dB@1MHz
Response Time:	Less than 5 nanoseconds
Temperature Range:	25°C (77°F) nominal
Protection Mode:	Line to neutral, zero ground leakage
UL1449-2 Adjunct Results:	1000 surges, 6000 volts, 3000A, C1, and B3 waveforms (IEEE C62.41), <b>NO FAILURES</b>
Federal GSA specs (1996)	Grade A, Class 1, Mode 1
Diagnostic LEDs (surge)**	Top (green): ON = ground verified Center (green): ON = protection active Bottom (red): ON = protection reduced*
Applicable Standards:	UL1449-3, IEEE standard 587-80 A & B, IEEE standard C62.41-1991, IEC 1000-4-5-1995 (IEC 801-5).
Safety Agency Approvals:	ETL Listed US and Canada.

\*\*TCR® surge suppression technology provides the assurance of Grade A, Class 1, Mode 1 endurance and performance testing plus visual diagnostic LEDs. The ground verified (green LED), protection active (green LED) should always be ON and the reduced protection (red LED) should be OFF. In the unlikely event the red LED illuminates, full suppression capability is NOT immediately or even necessarily compromised. The red LED indicates the overall life expectancy of the unit may be reduced. Contact Lowell for repair or replacement under the unit's ten year warranty.

### Mechanical Specifications:

Dimensions:	9"W x 1.75"H x 6"D
Weight:	5 lbs.
Input Connections:	Attached IEC cord with NEMA 5-20P plug
Output Connections:	(1) duplex 20A receptacle mounted on 90° rotatable plate.
Chassis:	Steel with black powder epoxy finish
Mounting:	(2) mounting brackets

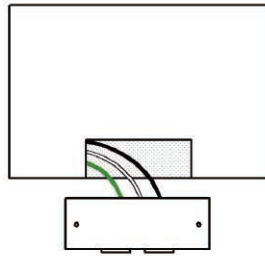
### Ground Transient Filter Specifications (ACSP-2002-GTF-HW):

Operating Voltage:	120 VAC	
Operating Current:	20 Amps	
DCR:	.035 ohms	
Impedance:	60 Hz:	.06 ohms
	100 kHz:	100 ohms
	1 mHz:	1 Kohm

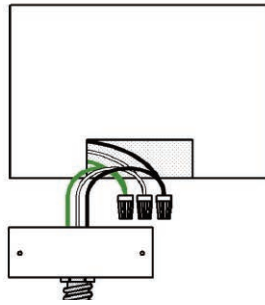
Models: ACSP-2002-HW, ACSP-2002-IG-HW, ACSP-2002-GTF-HW,  
 ACSP-2002-VTE-HW, ACSP-2002-IG-VTE-HW, ACSP-2002-RPC-HW, ACSP-2002-IG-RPC-HW

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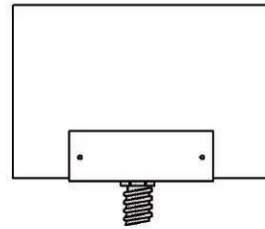
## Changing from receptacle output to hardwired output



Remove receptacle plate and disconnect receptacle.



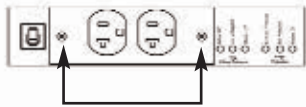
Attach conduit with wires to blank knock-out plate. Splice to receptacle wires.



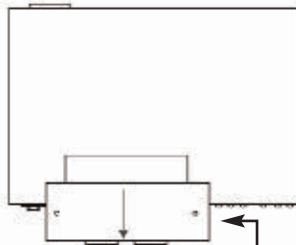
Install using screws from receptacle plate.

## Rotating Outlet Plate

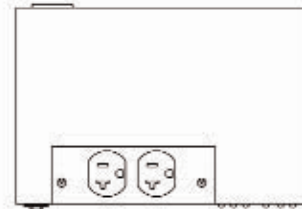
US Patent No. D535178S



Remove the 4 screws holding the rotating outlet plate (2 on front, 2 on top).

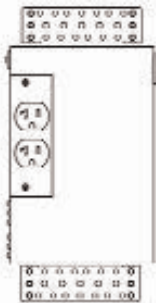


Pull the outlet plate away from the chassis and rotate.



Re-install the 4 screws.

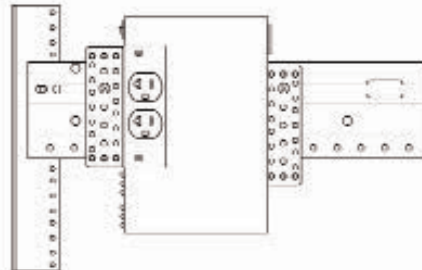
## Installation Options with Mounting Brackets



Surface-mount with exposed brackets.



Surface-mount with concealed brackets (behind unit).



Mount to rack rail supports or 10-32 tapped rack rail.

## Control Options for ACSP-2002-RPC-HW and ACSP-2002-IG-RPC-HW

