



THE WORLD LEADER IN
POWER CONDITIONING TECHNOLOGIES



Powerframe® 420

SURGE ELIMINATOR & POWER CONDITIONER

- **Advanced Series Mode®** Surge Protection
- **Impedance Tolerant®** EMI/RFI Filtering

The SurgeX Powerframe 420 provides guaranteed surge protection and power conditioning for audio, video, broadcast and computer equipment. Powerframe 420 units are compact 80 Amp load centers for multi-branch circuit applications. They offer four independent 20 Amp circuits in a 16" x 12" x 4" magnetic shielding NEMA enclosure and meet code for use at the service entrance, sub-panels and in ceiling plenums.

The unit features both common mode and normal mode *Impedance Tolerant* EMI/RFI filtering for a comprehensive power conditioning solution.

SurgeX *Advanced Series Mode* technology is superior to conventional MOV circuitry or MOV-Hybrid designs and is completely non-sacrificial. Our zero let-through technology provides the most reliable protection available. It stops all surges up to 6,000 volts (unlimited surge current) without producing harmful side effects such as ground contamination or common-mode disturbances.



Professional AC Power Products

www.surgex.com

10-YEAR WARRANTY

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SPECIFICATIONS

Load Rating: 20 amps per circuit @ 120 volts (80 amps total).

Power Requirement (no load): 15 watts per circuit.

Surge Let-Through Voltage (6000-volt surge): 0 volts.

UL 1449 Adjunct Classification Test Results: 1000 surges, 6000 volts, 3000 amps, B3 pulse; Measured suppressed voltage: 170 volts; no failures.

Federal Guidelines: Grade A, Class 1, Mode 1 (CID A-A-55818).

EMI/RFI Filter, Normal Mode (50-ohm load): 40 dB @ 100 kHz; 50 dB @ 300 kHz; 50 dB @ 3 MHz; 50 dB @ 30 MHz

EMI/RFI Filter, Common Mode (50-ohm load): 18 dB @ 300 kHz; 30 dB @ 1 MHz; 50 dB @ 5 MHz; 50 dB @ 20 MHz

Maximum Applied Surge Voltage: 6000 volts.*

Maximum Applied Surge Current: Unlimited, due to current limiting.*

Maximum Applied Surge Energy: Unlimited, due to current limiting.*

Endurance (C62.41-1991 Category B3 pulses): 1 kV>500,000; 3 kV>10,000; 6 kV>1000.

Dimensions: 16.0" H x 12.0" W x 4.0" D (40.6 x 30.5 x 10.2 cm)

Weight: 30 lbs (13.6 kg)

Temperature Range: 5° to 35° C

Humidity Range: 5% to 95% R.H., non-condensing.

Agency Listings: ETL and cETL (UL 1449, 2nd edition; CSA C22.2 No.8-M1986, R2000)

*1.2 x 50 μ s pulse, industry standard combination wave surge, as per IEEE C62.41.

TECHNICAL DESCRIPTION

The Powerframe 420 shall be housed in a magnetic shielding NEMA steel enclosure. It shall operate from 120 volts AC and have a barrier strip accessible through knock-outs in the enclosure for hardwiring power input and output connections. Overall dimensions shall be 16.0" H x 12.0" W x 4.0" D. Weight shall be 30.0 pounds.

The Powerframe 420 shall have a load rating of 20 amps per circuit at 120 volts (80 amps total), a self-test circuit with visual indicator and provide EMI/RFI filtering. It shall meet Federal Grade A, Class 1, Mode 1 guidelines for powerline surge suppressors and withstand at least 1000 occurrences of surge pulse voltages up to 6000 volts.

FEATURES

- Magnetic shielding steel enclosure
- Advanced *Series Mode* surge protection
- Advanced *Impedance Tolerant* EMI/RFI filtering
- Self-test circuit with visual indicator
- 10-year warranty
- **Made in U.S.A.**

**NO
MOVs**



SURGE[®]

Professional AC Power Products

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Specifications subject to change without notice. *SurgeX* is a division of New Frontier Electronics Inc.

This product, including its components and/or processes carried out thereby, are covered by one or more of the following:
U.S. Pat. No. 4,870,534; 4,870,528; 6,728,089; 6,744,613; 7,068,487. Can. Pat. No. 1,333,191; 1,332,439. Other Patents Pending.