

# SA3600 Commercial Power Conditioner Component

## Patented Technology, All-Wire Protection

www.bantamcleanpower.com

Invented, Patented, Engineered and Manufactured in the USA



#### **Application Notes**

An all-wire power conditioner component capable of blocking normal and common mode transients and surge energy as part of a complete electrical enclosure or UPS. The SA3600 is a wave-shaping and ground filtering device effective in suppressing harmful electrical signal emissions. Protected by U.S. Patent 8,223,468.

#### **Electrical Features**

Input and Output connectors	0.25" QC spades
Circuit Protection	None, required

#### **Functionality Performance**

Surge Energy Suppression

Reflected Signal Suppression

MIL-STD-4561: CS114 Test Results (conducted by NTS Labs, 2018)

Harmonics Filtration

### **Ratings and Dimensions**

Input	100—240 VAC Single Phase, 50/60 Hz
Output	Same as input
Maximum Current	US and Canada—15 amps
	Int'I —10 amps
Maximum Wattage	3600
Regulatory Compliance (Pending)	UL 62368-1, CE
Power Factor	0.99
H x W x D (mm)	38 x 52 x 153
Weight (grams)	300

More than 99% of all surge energy is blocked from operating loads during an event. UL 1449 Adjunct testing confirms full surge protection and no degradation of device or protected equipment after 1280 sequential 6KV/500 8/20us ring-wave injections in a 24-hour period.

The common mode has a broad resonance at 1 MHz providing approximately 18 dB of insertion loss, with no attenuating effects observed below 10 kHz.

The differential mode has a broad resonance at 1 MHz with continued RF attenuation averaging approximately 25 dB to 30 MHz.

Significant suppression characteristics in the 1 MHz to 20 MHz frequency spectrum, which is commonly known to contain the majority of problematic EMI noise sources in nearly every industry platform.

Current harmonic suppression varies based on the load impedance (current draw). In all cases, no suppression of the 60 Hz fundamental current was observed (as expected). Current harmonic suppression is greatest above 1 kHz to 6 kHz.