Bantam Clean Power

www.bantamcleanpower.com

Bantam Applications

3-D Printers

Symptoms:

A US manufacturing company uses 3D Printers to make Prototypes to speed product design and development. Complicated prototypes can take over 12 hours for print, so when a print stops, or the programing is interupted, flaws appear in the 3D Print. The process needs to be restarted.

Cause:

Linear and non-linear equipment were sharing the same electrical distribution infrastructure and these devices contribute to poor power quality, primarily surges, spikes, harmonics, noise and impedance characteristics to the common power system. This power pollution was suspected as the cause for print failures and extended design cycles.

Cost:

Quick product development is a competitive advantage and unexpected and unexplained problems with prototype printing was affecting the manufacterurs ability to meet customer expectations. Print problems delayed prototype production on the next product in development, needlessly extending lead times.

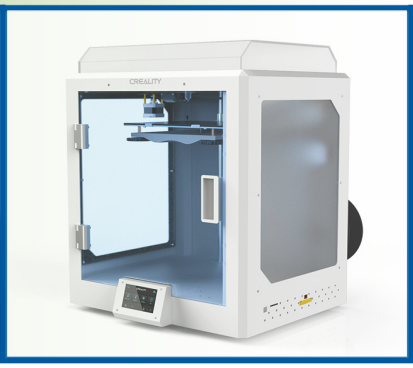
Solution:

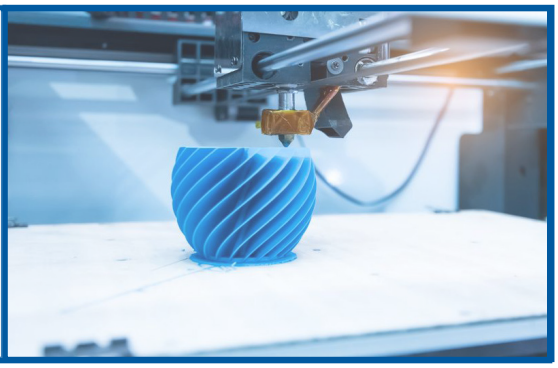
The printers were plugged into the Bantam 15 amp Vanguard, ensuring conditioned power was going to the 3D printers. Printers were protected from surges, spikes, errant frequencies and harmonics. The Bantam technology also provided a stable ground reference to ensure accurate data interpretation.

Savings:

The random printer problems stopped. After over 6 months of continuous operation, the 3D printers did not experience any disruptions due to poor quality power. Production efficiency, on time delivery, and customer satisfaction improved.

Surge Protection ● Power Conditioning & Filter ● Stable Ground Reference
Harmonic Attenuation ● Power Factor Correction ● Hacker Protection





Contact: Lodestone Group, 4769 E. Wesley Drive, Anaheim CA 92807 • (714)-970-0900

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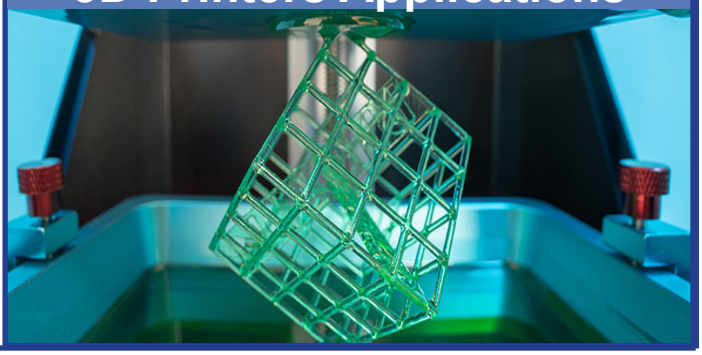
Patented Technology that Protects Line, Neutral and Ground

3D Printers Applications

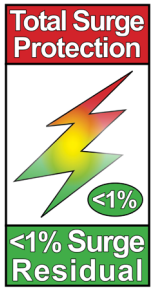


The ideal Power Conditioner to avoid 3D Printer malfunctions. Absorbs surges, spikes transients, EMI & RFI, and reduces harmonic distortion. The Patented Circuit is a Bi-Directional filter of Line, Neutral and Ground, so devices sharing a common power source do not share surges, transients, and harmonics.

Bantam Vanguard PP18004 120V 15 amps

Input Voltage:	110-120 VAC Single Phase
Output Voltage:	110-120 VAC Single Phase
Outlets:	Four (4) filtered NEMA 5-15R outlets
Output Current:	15 amps
Nominal Frequency:	50 to 60 Hz
Circuit Protection:	15 amp thermal breaker, push-to-reset
Safety Standard:	MET Listed to UL and cUL Standards

Portable and compact, the 15 amp Vanguard packs incredible Power Conditioning and Surge Protection Technology in a small affordable package.



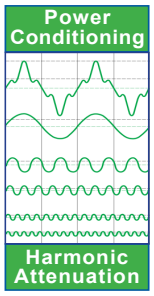
Bantam Citadel RM1440 120V 15 amps

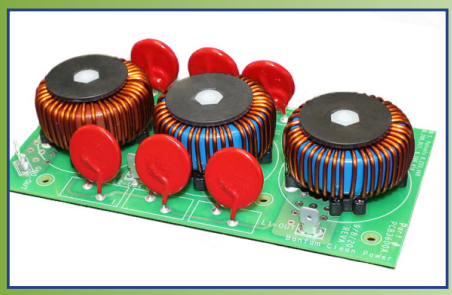
Input/Output Voltage:	110-120 VAC 60 Hz, Single Phase
Outlets:	Six (6) filtered NEMA 5-15R outlets Two (2) IEC 320 C13 outlets, adapters included.
VA Rating:	1440VA 50 to 60 Hz

Bantam Citadel RM2880 220V 15 amps

Input/Output Voltage:	220-240 VAC 60 Hz, Single Phase
Outlets:	Eight (8) filtered IEC 320 C13 outlets
VA Rating:	2880VA 50 to 60 Hz
Regulatory Compliance:	UL 62368-1
Circuit Protection:	Thermal breaker, push-to-reset
Color LCD Display:	Real Time Display For: Surge Count, Voltage,Current, Frequency, Wattage, Power Factor

Available in 120 or 220 volts, the versatile and effective, 15 amp Citadel can be rack, floor or wall mounted. Essential protection for computers, servers, test equipment, security, POS, controllers, audio





Bantam Tempest SA3600 100-240V 15 amps

Input/Output Voltage:	100-240 VAC Single Phase
Max Wattage:	3600 50 to 60 Hz
Output Current:	10-15 amps.
Input/Output Connections:	3 each 0.25" QC Spade Connectors
Regulatory Compliance:	UL 62368-1, CE

This Bantam Patented Circuit is UL Component Listed so OEMs can include superior surge and power conditioning in a wide variety of products.

Surge Protection ● Power Conditioning & Filter ● Stable Ground Reference
Harmonic Attenuation ● Power Factor Correction ● Ground Infiltration Protection