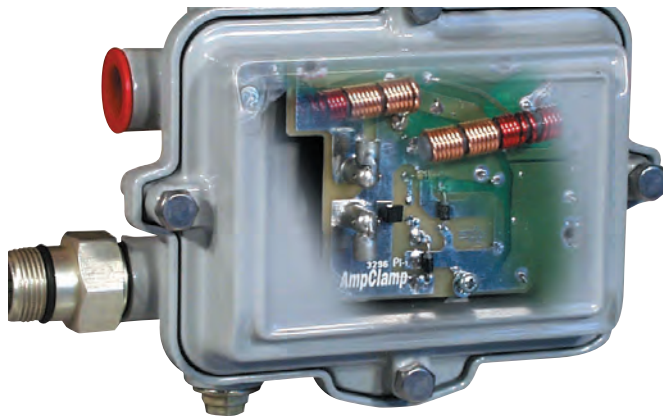
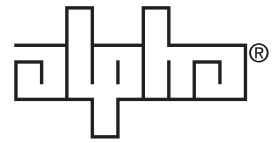


# AMP CLAMP™

## SURGE PROTECTION



- Alpha Amp Clamp eliminates damaging transients and surge voltages
- Durable dual SCR circuitry dissipates significantly more energy than single triac designs
- Easy installation in “host” distribution hardware
- Flexible configurations compatible with most common power inserter manufacturers
- Compatible with any broadband coaxial cable system utilizing 60 or 90VAC powering
- Cost-effective solution significantly reduces system repair costs

Alpha's Amp Clamp eliminates surge voltages in coaxial cable systems caused by lightning strikes, sheath currents and utility-induced switching transients. The proprietary Alpha design also resists false triggering, which is common among triac circuits. The plug-in Amp Clamp circuitry can be factory installed in the desired host hardware, or easily integrated into existing power inserters, splitters, couplers or amplifiers.

# Amp Clamp

## General Specifications

Trigger Response:	<60Ns (high speed bi-directional voltage sensing)
Current Clamping:	35A (continuous) 500A (peak one cycle)
Heat Dissipation:	Semiconductors heat sinked to power inserter case (most models)
Surge Testing:	ANSI C-62.41 (IEEE 587)

## Host Equipment Compatibility

Manufacturer	Model	Amp Clamp
C-COR	PS-GHz-C	ACCI-3
Motorola/GI/Jerrold	SSP-PIN	ACJG-1N
Magnavox	8-LPI	ACM-3
Scientific Atlanta	SAIGW-RFI	ACSG-3
National Electronic Devices	NSA-P	ACC1-3
Alpha Technologies	APX 6008/14	ACAT-3P

Note: ACJG-1 versions include power inserter and Amp Clamp. ACJG-3 versions include Amp Clamp only

## Operations

The Alpha Amp Clamp circuit consists of two rugged SCRs (silicon controlled rectifiers) connected in an inverse parallel configuration with a steady state current rating of 35A and a peak one cycle surge forward current of 500A. The SCRs are triggered into conduction whenever the Amp Clamp's bi-directional trigger diode senses the presence of voltage transients exceeding its trigger threshold. The fast response trigger diode gates the appropriate SCR on in nanoseconds to shunt the surge current to the ground, effectively protecting sensitive Cable TV equipment from transient over voltage conditions.

The Amp Clamp redirects power disturbances safely to ground, protecting the system's active and passive devices, including: Power Inserters, Power Supplies, Amplifiers, Fiber Nodes, Directional Couplers, Splitters and Line Extenders.

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