

STC Series – Data/Signal Line Surge Protection Devices for Transient Data

The rapid development of automated controls, telecommunications and fire/security systems has made it imperative to have properly coordinated low-voltage protection. Modern networked industrial facilities require error free transmission of information for maximum productivity and integrity of data.

The SolaHD STC series protects all susceptible low-voltage cable routes entering a facility and at key points within the building. These devices can be used as part of a multi-stage protection strategy which involves clamping the initial high-energy impulse, filtering any remaining noise or transients to the PLC or sensitive equipment and finally, protecting the Data/Signal lines entering and leaving the control panel. Modern, networked industrial facilities require error free transmission of information for maximum productivity and data integrity.

The hybrid design of these Data/Signal Line surge suppressors allows them to respond quickly with high energy absorption. These units are available in a variety of application specific voltage levels and packaging configurations. The STC series is used to protect network signal lines entering or leaving control panels including PLCs, universal remote I/O, DeviceNet™ and Data Highway Plus.



Select Models E175287

Related Products

- Single and Three Phase Power Conditioners
- Uninterruptible Power System
- Transient Voltage Surge Protective Devices
- Active Tracking® Filters
- Power Supplies

Low Voltage - Data/Signal, STC Series

Series	Application
STC-POE	Power-over-Ethernet, Category 5 and Category 6
STC-DRS	DIN Rail mountable, single pair surge protection
STC-642	Two-Pair Data/Signal Protection
STC-CCTV	High-Frequency Coaxial protection for head and camera ends

STC-CCTV Coax Series



The STC-CCTV Series is tailored specifically to CCTV, data, audio and cable applications. These units are single Coax Surge Protective Devices implementing three-stage hybrid technology. They address overvoltage transients with a primary gas tube, and secondary silicon avalanche components. Over-currents (e.g. sneak and fault currents) are mitigated with solid-state resettable fuses (PTCs). The STC-CCTV units are designed in accordance with NFPA 780 (2004 Edition) requirements, with up to 20kA of surge current capability. The STC-CCTV-75I model has an isolated ground and is recommended for use at the camera end.

Applications

- CCTV Head End
- CCTV Camera End

Features

- Hybrid, three-stage technology
- Sneak/fault current protection
- Low insertion loss
- Shielded case
- Five year limited warranty

Certifications and Compliances

- Listed - UL 497B
- RoHS Compliant
- NFPA 780 (2004) Compliant for Communication Protectors

Selection Table

Catalog Number	Description
STC-CCTV-75	Without isolated ground
STC-CCTV-75I	With isolated ground

Specifications

Description	STC-CCTV-75	STC-CCTV-75I
Operating Voltage	5	
Clamping Voltage	6	
Frequency Range	0 to 20 MHz	
Equipment Location	IEEE Category C, and Category B	
Rated Load Current	0.35 amperes	
Topology	2-port Series	
STC Technology	Primary Stage: Gas Tubes, Secondary Stage: Silicon Avalanche Components Third Stage: resettable fuses (PTCs)	
Modes of Protection	Signal to Ground	
Nominal Discharge Current per Mode	10.0 kA	
Maximum Discharge Current per Mode	20.0 kA	
EMI Attenuation	< 0.1 dB at 20 MHz	
VSWR	< 1.2	
Continuous Power	0.72 Watts	
Operating Humidity	0-95 % Non-condensing	
Operating & Storage Temperature	-40°C to +85°C	
Input & Output Connection Type	BNC, 50/75 Ohm	
Mounting	Flange	
Enclosure Type	Metal	
Warranty	5 year limited warranty	