

## 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  |
|-----------------|--|
| <b>STC-POE</b>  | Power-over-Ethernet, Category 5 and Category 6             |
| <b>STC-DRS</b>  | DIN Rail mountable, single pair surge protection           |
| <b>STC-642</b>  | Two-Pair Data/Signal Protection                            |
| <b>STC-CCTV</b> | 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,<br>Secondary Stage: Silicon Avalanche Components<br>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  |              |