

## DSP Series

- Use for CCTV (Closed Circuit Television) system application.
- Protects the CCTV camera and monitoring system from Transient Over-voltage cause by lightning or electrical switching in the Main Power Supplies.
- Can be installed at CCTV Camera, CCTV monitoring system control panel, terminal boxes and equipment panels.
- Suitable for BNC Coaxial Connector both earthed and un-earthed system.
- Uses hybrid circuit protection to achieved both very low let-through voltage and high discharge current.

## Product Features

- Maintenance free.
- Series connection.
- High current limit (300mA) allow usage in wide range of system.
- Low in line resistance of 1 ohms allow easy compatibility to applied system.
- Changeable configuration from earthed to un-earthed systems.
- Allow high bandwidth of more than 20Mhz.
- Metallic Enclosure.
- BNC Coaxial connector allow easy installation and replacement of the protector.
- DIN rail mounting or panel mount enable easy installation.
- Earthing via DIN Rails permitting easy installation
- Low let-through or clamping voltage ( $V_p$ )
- Full mode protection (L-Screen, L-earth and Screen-E)
- High Discharge Current
- Continuous and repeated protection in intense environment

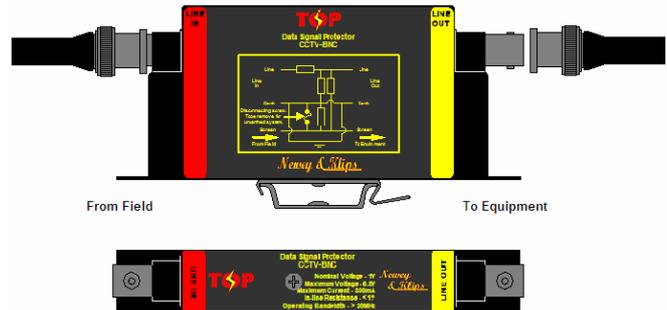
## Testing Specification

- Tested to 5kV 10/700 $\mu$ s, Accordance to:
  - \* BS6651:1999, Appendix C, Cats C-High
  - \* ITU IX K17 (CCITT)

## Installation

To begin it is important to ensure that the protector is suitable for the system to be installed based on the voltage, current and bandwidth. The protector is installed in series as indicated in the diagrams below. Ensure that the input (wires going away from the equipment) and output (wires going towards the equipment) are connected correctly to ensure protection. Arrange the incoming and outgoing wire correctly to ensure no transient goes back into the system via induction.

When installing for unearth system, remove the metallic screw at the top of the box and replace it with the non-metallic screw provided.



**Product Specification**

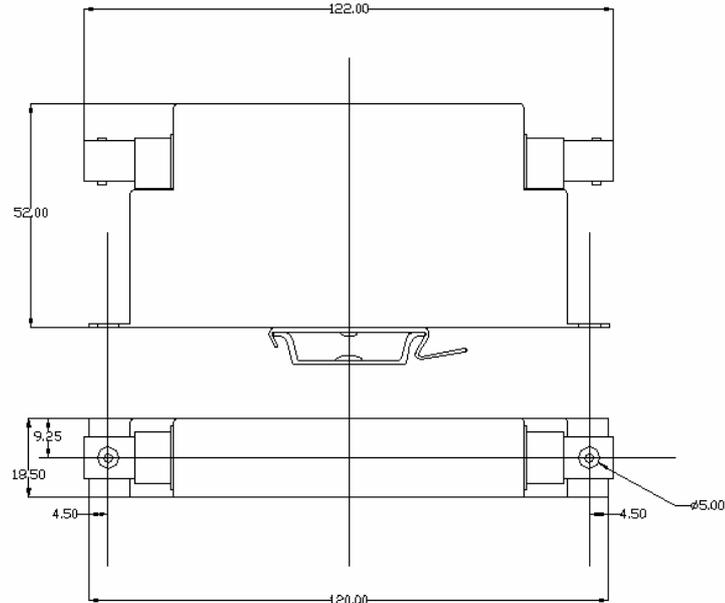
<b>Model</b>	<b>CCTV-BNC</b>
<b>Nominal Voltage (Peak to Peak)</b>	1 V
<b>Maximum Continuous Operating Voltage</b>	6.3V
<b>Maximum Load Current</b>	300mA
<b>Clamping or Let-through Voltage <math>V_p</math></b>	
<b>5kV 10/700<math>\mu</math>s, 125A ITU Standard</b>	17.5V
<b>Nominal In-Line Resistance (per line)</b>	1 $\Omega$
<b>Bandwidth (-3dB, 75<math>\Omega</math> system)</b>	More than 20MHz
<b>Voltage Standing Wave Ratio</b>	Less than 1.2
<b>Leakage Current (Nominal Voltage)</b>	1 $\mu$ A
<b>Capacitance</b>	Less than 30pF
<b>Mode of Protection</b>	Line to Screen, Line to Earth, Screen to Earth

Note: When used on system that are not earthed or screen are isolated, replace metallic screw at the based beside DIN rail clip with the non-metallic screw provided. Clamping voltage of between screen and earth will be 500V if used in this method.

<b>Model</b>	<b>CCTV-BNC</b>
<b>Total Max. Discharge Current (<math>I_{max}</math>)</b>	10kA
<b>8/20<math>\mu</math>s</b>	

**Other Specification**

<b>Operation Temperature</b>	-40 to 70°C
<b>Mounting</b>	DIN rail according to EN50022 or Screw mount (DIN rail is removable)
<b>Conductor Size (mm<sup>2</sup>)</b>	BNC Coaxial Female Connector
<b>Weight (g)</b>	250
<b>Physical Dimension (mm)</b>	



Note: The company reserve the right to make changes to the product design and specification without prior notice due to continuous product improvement policy