



CITEL

■■■ Reliability in Surge Protection ■■■



Surge Protection for Security Systems



The components used in outdoor security systems are highly susceptible to lightning surges. If your security systems are affected by a transient overvoltage from a lightning storm, then your entire protection strategy could be compromised or even shut down. In order to avoid equipment damage or system downtime, surge protection must be used.

CITEL offers a full line of Surge Protection Devices (SPD's) specifically designed for security systems and the associated networks.

CAMERAS



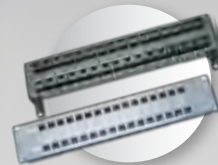
FIRE ALARM



SECURITY ROOM



ACCESS CONTROL



Surge Protectors for Video Cameras

MSP-VP Combination Surge Protectors

The MSP-VM-2P series is designed to protect pan-tilt-zoom security cameras connected to a CCTV network from transient overvoltages. It is a triple protection system for video signal, 24 V or 120 Vac power supply and RS485 data signal lines.



Technical Data	MSP-VM24-2P	MSP-VM120-2P
Max. Video Line Voltage	6 Vdc	6 Vdc
Max. Data Line Voltage	8 Vdc	8 Vdc
Max. Power Line Voltage	30 Vac/Vdc	150 Vac
Nominal Discharge Current (In) <i>8/20μs impulse - 10 times</i>	5kA/10kA (video)	5kA/10kA (video)

MJ8 Surge Protectors

This surge protector is designed to protect high speed data communications on RJ-45 lines. This SPD uses a combination of GDT and diode technology and is UL497B listed.



Technical Data	MJ8-CAT6	MJ8-POE-A/B
Max. Data Rate	1,000 Mbps	1,000 Mbps
Max. DC Signal	7.5 Vdc	7.5/60 Vdc
Application	Ethernet Cat. 6	PoE Networks
Nominal Discharge Current (In) <i>8/20μs impulse - 10 times</i>	100 A	500 A (L/L) 2,500 A (L/G)

DIN-BNC Surge Protectors

The DIN-BNC series provides surge protection for BNC connections and utilizes hybrid GDT and diode technology. This SPD can be mounted directly on a DIN rail and is UL 497B listed.



Technical Data	DIN-BNC
Nominal Voltage Line (DC)	6 Vdc
Nominal Discharge Current (In)	300 A
Connectors	BNC Female/Female

Surge Protectors for Control Rooms

M50 Hard-Wire Surge Protectors

The M50 Hard-Wire surge protector is a standalone SPD housed in a NEMA metal enclosure. The SPD includes a visible LED status indicator and an audible alarm for efficient maintenance.



Technical Data	M50-120Y	M50-120T
Max. Operating Voltage	120/208 V	120/240 V
Nominal Discharge Current (In) <i>8/20µs impulse - 10 times</i>	20 kA	20 kA
Maximum Discharge Current	50 kA	50 kA
Mounting	Bulkhead (3/4")	Bulkhead (3/4")
Thermal Disconnecter	Internal	Internal

DS40 Series Surge Protectors

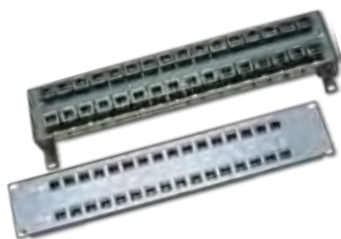
This AC SPD is ideal for use in control rooms with a pluggable module design and remote signalling. The DIN rail mounting is easy to install, and the SPD's thermal disconnection technology ensures complete operational reliability and safety.



Technical Data	DS41S-480	DS41S-400	DS41S-320	DS41S-230	DS41S-120
AC Network	480 V	277-347 V	220-277 V	220-240 V	120-127 V
Max. Operating Voltage	550 V	420 V	320 V	275 V	150 V
Nominal Discharge Current	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current	40 kA	40 kA	40 kA	40 kA	40 kA
Wiring	Screw Terminal	Screw Terminal	Screw Terminal	Screw Terminal	Screw Terminal
Mounting	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail
Remote Signalling	Standard	Standard	Standard	Standard	Standard

19" Rack Surge Protectors

The RAK series of surge protectors is ideal for protecting incoming video and datalines in the control room and wiring closet. These SPD's are available in configurations that support all network types and are UL497B listed.



Technical Data	RAK16-BNC	RAK16-E-C6	RAK16-POE-A	RAK16-POE-B
Number of Ports	16	16	16 or 32	16 or 32
Maximum Line Voltage	7.5 Vdc	7.5 Vdc	60 Vdc	60 Vdc
Nominal Discharge Current	132 A	100 A	50 A	50 A
Connectors	BNC	RJ45	RJ45	RJ45

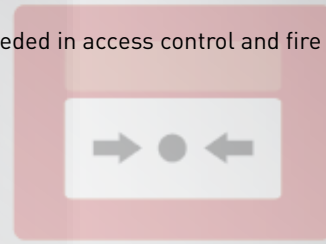
Surge Protectors for Access Control and Fire Alarm Systems

CITEL's AC and DC surge protectors are designed to cover all possible SPD configurations needed in access control and fire alarm systems.

AC Surge Protectors



Technical Data	DS240S-120	DS44S-120/G	MSB10-400
AC Network	120-127 V	120/208 V	230 V
Configuration	Single-phase	3-phase +N	Single-phase
Max. Operating Voltage	150 V	150 V	255 V
Nominal Discharge Current	20 kA	20 kA	3 kA
Maximum Discharge Current	40 kA	40 kA	10 kA
Wiring	Screw Terminal	Screw Terminal	Wires
Mounting	DIN rail	DIN rail	Wall/Flange
Remote Signalling	Standard	Standard	No



DC Surge Protectors



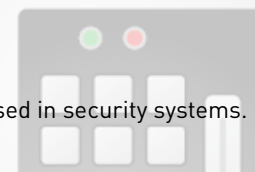
Technical Data	DS220S-12DC	DS220S-24DC	DS230S-48DC
Nominal DC Voltage	12 Vdc	24 Vdc	48 Vdc
Max. Operating Voltage	24 Vdc	38 Vdc	65 Vdc
Nominal Discharge Current	10 kA	10 kA	20 kA
Maximum Discharge Current	20 kA	20 kA	30 kA
Wiring	Screw Terminal	Screw Terminal	Screw Terminal
Mounting	DIN rail	DIN rail	DIN rail
Remote Signalling	Standard	Standard	Standard

Dataline Surge Protectors

These surge protectors are specially engineered to protect the telecom networks and datalines used in security systems.



Technical Data				
Typical Application	RS422	RS232/RS485	4-20mA	48 V line
Configuration	1pair+shield	1 pair+shield	1 pair+shield	1 pair+shield
Nominal Line Voltage	6 V	12 V	24 V	48 V
Max. line Current	300 mA	300 mA	300 mA	300 mA
Nominal Discharge Current	10 kA	10 kA	10 kA	10 kA
Maximum Discharge Current	20 kA	20 kA	20 kA	20 kA
DIN Rail Mounting	DLA-06D3	DLA-12D3	DLA-24D3	DLA-48D3
Flush Mounting	B180-06D3	B180-12D3	B180-24D3	B180-48D3





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