



CCTV CATALOGUE

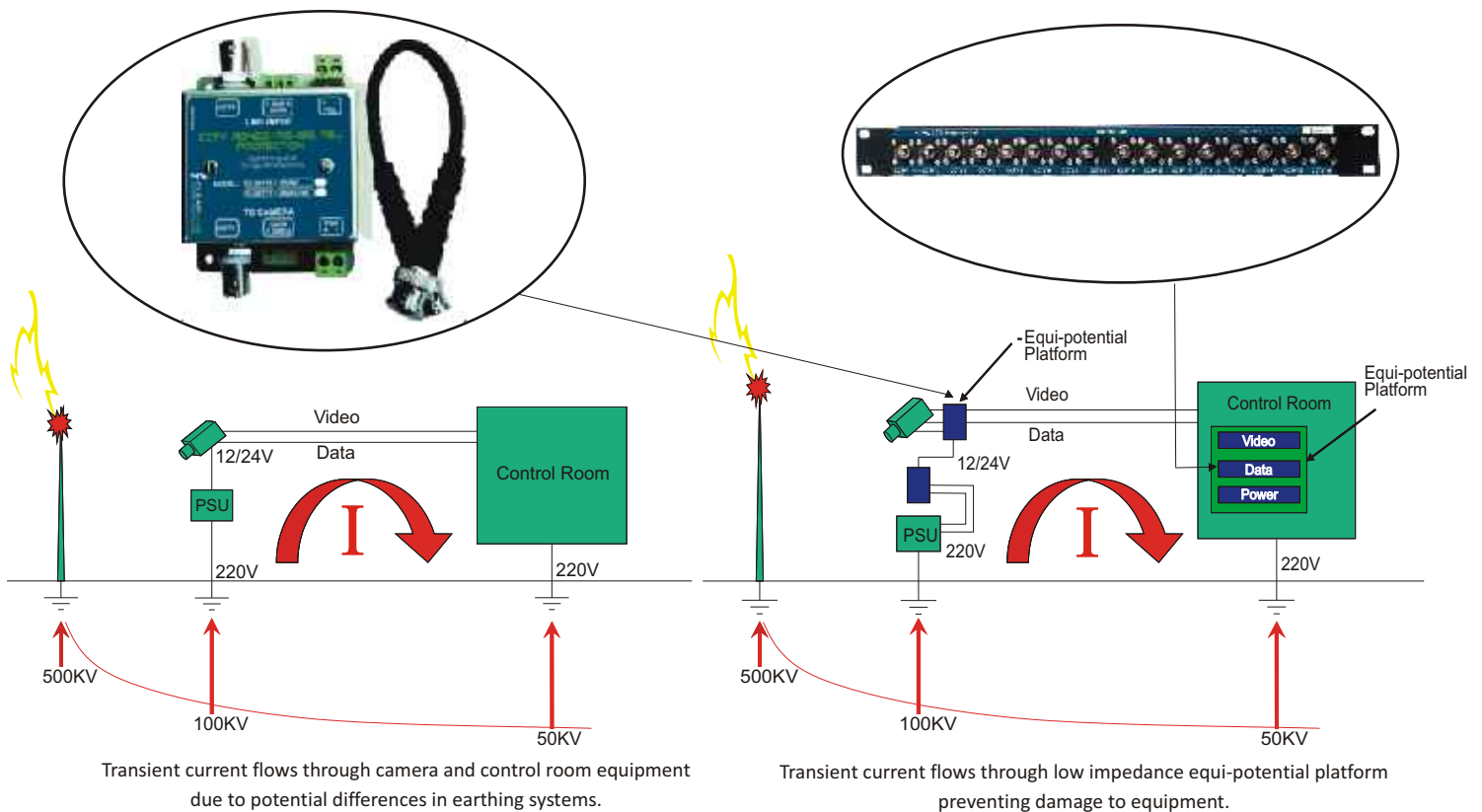
LIGHTNING AND SURGE PROTECTION

CLEARLINE PLATFORM CONCEPT

The key to Clearline's success is the equi-potential platform.

During a transient event the voltage potentials between power, data and video lines can rise to several thousands of volts causing extensive damage and costly down time to surveillance systems.

Simply protecting the power, data or video line individually provides little or no protection against this type of transient. In order to prevent damage, a common, low impedance path around the sensitive components needs to be provided. Clearline's unique protection platform not only provides protection for each of the connected lines but also a low impedance path between protection devices ensuring safe diversion of transient current even when there is a poor earth available.



COAXIAL PROTECTION

Video Surge Protection

This unit is an in-line protection device designed to protect against surges originating on coaxial video cables.

Specifications	12-00199	12-00299
Max. operating voltage	1V p-p	1V p-p
Max. discharge current common mode	2kA	2kA
Insertion loss at 10MHz	0.08dB	0.08dB
Connectors	BNC M-F	BNC F-F



Order code: 12-00199

CCTV

VIDEO PROTECTED PATCH PANEL

This 12-00321 is a 483mm (19inch) 1U rack mountable patch panel that allows up to 16 coaxial protectors to be fitted. This unit offers cable management. This unit is ideal for protecting video inputs to DVR's.

Features:

- Easy installation
- Low insertion loss
- Failsafe protection



Order code: 12-00321

Specifications	12-00614	12-00321	12-00503
Panel loaded with:	16 x 12-00199	16 x 12-00299	Panel Only

Note:

It is crucial to ensure that the power and video inputs are protected and that the two protection devices are bonded together to the electrical earth.

CAMERA PROTECTION

Video & DC Power Surge Protection (Static Cameras)

A combination protector that protects both power and data on CCTV and video systems. This device, when correctly installed, will provide excellent protection even in the presence of poor earthing systems. A combined video and power surge arrester, based on the surge platform concept to fully protect a camera system even where no connection to earth is available.

Specifications		
	12-00027	12-00499
Max. Operating voltage	1V p-p	1V p-p
Max. Operating current	0.3A	0.3A
Max. Operating current (Differential mode)	2kA	2kA
Max. discharge current (Common mode)	2kA	2kA
Residual voltage (Differential mode at 5kA (8/20))	<2.5V	<2.5V
Insertion loss at 10MHz	0.08dB	0.08dB
Connectors	BNC F-F	BNC F-F
Temperature range	-10°C to 70°C	-10°C to 70°C
Application	CCTV Composite	CCTV Composite

Features:

- Easy installation
- Low insertion loss
- Failsafe protection



Order code: 12-00027



Order code: 12-00499

Video, DC Power and RS485/422 surge protection (PTZ Cameras)

Combination protection for CCTV with PTZ control. Will accommodate high speed data transmission lines. Implementation of surge platform gives a high degree of protection even in the absence of a low impedance earth connection.

Specifications	12-00170	12-00171
Max. operating voltage - Video	1V p-p	1V p-p
Max. operating voltage - DC feed	15 VDC	36VDC/24VAC
Max. operating voltage - Data	6.8V	6.8V
Max. current - DC feed	1A	1A
Max. current - Data	0.4mA	0.4mA
Max. discharge current - Video	2.5kA	2.5kA
Max. discharge current - DC feed	2.5kA (8/20)	2.5kA (8/20)
Max. discharge current - Data	2.5kA (8/20)	2.5kA (8/20)
Insertion loss at 10MHz	0.08dB	0.08dB
Connectors BNC	F-F	F-F



Order code: 12-00170

CCTV

CAT 5 Protection with DC Protection

Protection system for IP cameras. Video data is via Cat 5 connectivity and DC power protection has been provided.

Features:

- Easy installation
- Protects data and DC power
- Compact Size

Specifications	
Power Module	
Max. voltage	18VDC
Max. current	1A
Protection level at 5kA 8/20	Approx. 20V
Connectors	Pluggable screw terminals

Data Module			
Clamping Voltage	<10V (1.2/50)		
Max. discharge current - common mode	2500A (8/20)		
Max. discharge current - differential mode	300A (8/20)		
Pairs protected	1-2, 3-6		
Test frequencies in Mhz	20	62.5	100
Insertion loss in dB (with RJ45 sockets)	0.13	0.39	0.83
Next limits as per IEC 11801	>40.7 (35)	>30.7 (27)	>29.1 (24)
Return loss limits as per IEC 11801	>27.8 (15)	>31.4 (10)	>22.8 (10)
Data rate	>100Mbits/s		
Band width (3dB per pair)	>220MHz		
Standards compliance	Fast Ethernet 802.3U, IEC 11801 and IEEE 502.3		



Order code: 12-00506

CAT 5 Protection

For IP cameras and video equipment

Specifications			
Maximum discharge current - coarse protection	1kA (8/20)		
Maximum discharge current - fine protection	300A (8/20)		
Pairs protected	1-2, 3-6		
Standards compliance	Fast ethernet 802.3u, IEC 11801 and IEEE 802.3		
Test frequencies in MHz	20	62.5	100
NEXT (Limits as per IEC 802.3)	>43 (35)	>32.4(27)	>33.6 (24)
Return loss (Limits as per IEC 802.3)	>27.8 (15)	>31.4 (10)	22.8 (10)
Insertion loss in dB (with RJ45 sockets)	< 0.10	<0.10	<0.30
Clamping voltage	<10V (1.2/50)		
Data rate	>100 Mbits/s		
Bandwidth (3 dB) per pair	>350MHz		



Order code: 12-00670

POE INJECTOR AND SURGE PROTECTION

Multiport Power and Line protection unit

Features:

- Plug-and-Play concept
- All data and POE lines are protected (RJ45)
- Economical protection
- Each pair supports 100 Mbits/s

Protects fast ethernet LAN and POE equipment such as hubs, switches and network interface cards from induced lightning and electrostatic discharge.

Supports the compliment of 100Base-T configurations:

100Base-Tx, 100Base-T4 and 100Base-VG.

Backwards compatible to 10Base-T

Supplied with:

- RJ45 Cable (Cat5)
- IEC Power Cord

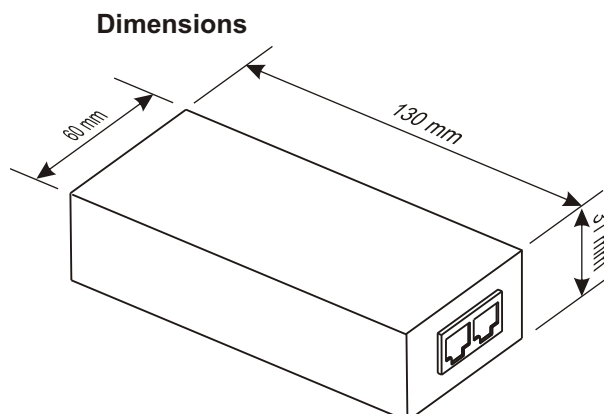


Order code: 12-00689

Order code: 12-00708

Specifications

Power Module	12-00689	12-00708
Nom. input voltage	230VAC 50Hz (100-240V AC)	230VAC 50Hz (100-240V AC)
Output Voltage	24V DC	48V DC
Current	1A	0.8 A
Max. discharge current Ismax (8/20)	2.5kA	2.5kA
Residual voltage at Ismax	Approx. 900V	Approx. 900V
Response time	<25ns	<25ns
Power ON	LED Red	LED Red
Working	LED Green	LED Green
Fault	Blinking	Blinking
Data Module	12-00689	12-00708
Clamping voltage	<5V(1.2/50)	<5V(1.2/50)
Max. discharge current (Fine protection)	40A (8/20)	40A (8/20)
Max. discharge current (Coarse protection)	2.5kA (8/20)	2.5kA (8/20)
Pairs protected (DATA)	1-2, 3-6	1-2, 3-6
Pairs protected (POE)	4-5, 7-8	4-5, 7-8
Data rate	>100Mbits/s	>200Mbits/s



FIBRE OPTIC PROTECTION

Fibre Optic Video Receiver

Specifications	12-00135
Bandwidth	30Hz to 16MHz - 3dB AGC + 12dB
AGC dynamic range	12dB
Receiver S/N ratio	>42dB
Output signal	1Vpp
Output impedance	75Ω unbalanced
Power Supply (12-00801)	+5 - 0 - -5 VDC 100mA
Operating temperature	-10°C to +70°C
Optical fibre	62.5/820mm multi mode
Connectors (optical/electrical)	ST/BNC female
Range	2000m
Dimensions	37.5mm x 25mm x 80mm



Order code: 12-00135

Fibre Optic Video Transmitter

Specifications	12-00794
Bandwidth	30Hz to 16MHz - 3dB
Modulation current laser diode	30mA
Input signal	1Vpp
Input impedance	75Ω unbalanced
Power Supply (12-00801)	12V DC 150mA
Operating temperature	-10°C to +70°C
Optical fibre	62.5/820mm multi mode
Connectors (optical/electrical)	ST/BNC male
Dimensions	25mm x 25mm x 80mm



Order code: 12-00794

Fibre Optic Kit

This fibre optic kit consists of a receiver and transmitter unit with power supplies. Fibre cables are immune to EMI/RFI, eliminating any need for concern in noisy environments. These devices are easy to install and will isolate your CCTV systems from lightning damage.



Order code: 12-00047

THE DATALINE SERIES

RS485 Opto-Isolator

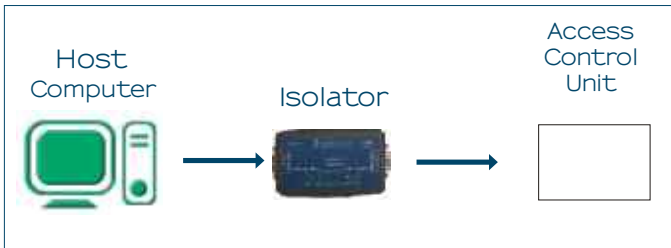
Features:

- High speed >1MHz
- 12kV Isolation
- IEC61000-4-2 protection level
- Low Power
- Compact size
- Easy installation

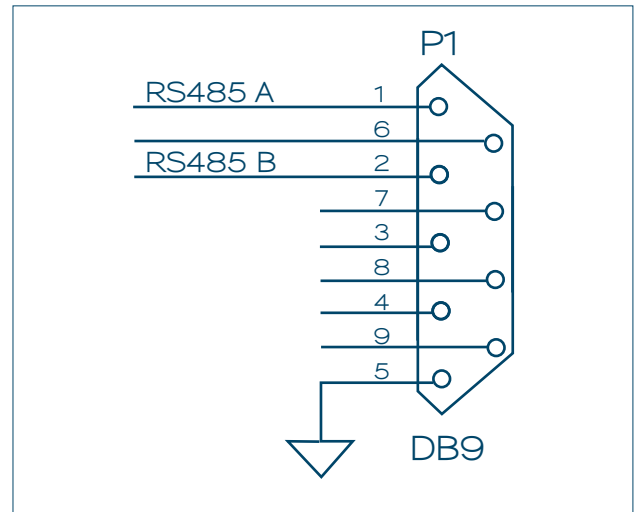


Order code: 12-00010

The RS485 Isolator provides high isolation and surge protection for any RS485 bus carrying data signals from a host computer to peripheral devices. Applications include access control and monitoring systems. No setup for baud rate is required as the device is transparent to dataflow. The unit is powered from a mains adaptor and draws 50mA at 12VDC. Indicators have been provided for power, RX and TX data.



RS485 Connection



High Speed RS485

A protection device for high speed RS485 data lines. Speeds in excess of 5Mbits/s may be utilised with low clamping voltage. Ideal for access control and CCTV - PTZ applications. Small footprint with Din-rail mounting.

Specifications	12-00347
Max. operating voltage (Vmax)	5V
Max. continuous current	0.3A
Max. discharge current 8/20 differential mode	10kA
Max. discharge current 8/20 common mode	10kA
Residual voltage at 8/20 differential mode	Approx. 3 X Vmax
Residual voltage at 8/20 common mode	Approx. 3 X Vmax
Series resistance	3.3 ohms
Temperature range	0° to + 70°C



Order code: 12-00347