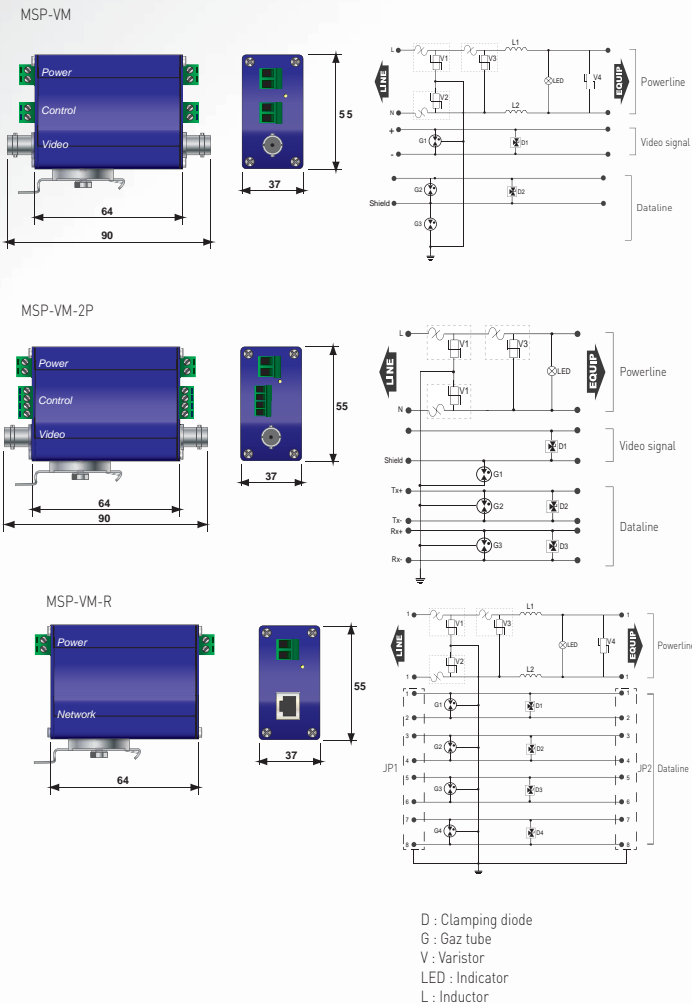


Surge protector for Video Survey Camera

MSP-VM series



Characteristics

CITEL Model	MSP-VM Range		
	MSP-VM12	MSP-VM24	MSP-VM230
Description	Surge protector for video survey camera Power/Data/Video		
AC power specifications			
Network	12 Vac/Vdc	24 Vac/Vdc	230 V single phase
AC system	-	-	TT-TN
Protection mode(s)	CM/DM	CM/DM	CM/DM
Max. DC operating voltage	Uc 15 Vac/Vdc	30 Vac/Vdc	255 Vdc
Max. Load current	IL 5 A	5 A	5 A
Residual current - Leakage current at Uc	Ic None	None	None
Nominal discharge current	In 5 kA	5 kA	5 kA
Max. discharge current -max. withstand @ 8/20 μ s by pole	I _{max} 10 kA	10 kA	10 kA
Withstand on Combination waveform - Class III test	Uoc 10 kV/5 kA	10 kV/5 kA	10 kV/5 kA
Protection level	Up 0.22 kV	0.22 kV	1.2 kV
Disconnection indicator	Green LED OFF and line cut-off		
Connection to Network	screw terminal 2.5 mm ² max		
Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 ed.4		
Dataline specifications			
Network	1 pair signal 0-5 V 8 Vdc	1 paire signal 0-5 V 8 Vdc	1 pair signal 0-5 V 8 Vdc
Max. DC operating voltage	Uc 8 Vdc	8 Vdc	8 Vdc
Max. Load current	IL 300 mA	300 mA	300 mA
Max. frequency	f max 10 MHz	10 MHz	16 MHz
Insertion loss	< 1dB	< 1dB	< 1dB
Nominal discharge current	In 2.5 kA	2.5 kA	2.5 kA
Max. discharge current -max. withstand @ 8/20 μ s by pole	I _{max} 5 kA	5 kA	5 kA
Protection level	Up 20 V	20 V	20 V
Disconnection indicator	interruption of transmission		
Connection to Network	screw terminal 1.5 mm ² max		
Standards compliance	IEC 61643-21 / EN 61643-21		
Video specifications			
Network	signal video	signal video	signal video
Max. DC operating voltage	Uc 6 Vdc	6 Vdc	6 Vdc
Max. Load current	IL 300 mA	300 mA	300 mA
Max. frequency	f max 100 MHz	100 MHz	100 MHz
Insertion loss	< 1dB	< 1dB	< 1dB
Nominal discharge current	In 5 kA	5 kA	5 kA
Max. discharge current -max. withstand @ 8/20 μ s by pole	I _{max} 10 kA	10 kA	10 kA
Protection level	Up 20 V	20 V	20 V
Disconnection indicator	interruption of transmission		
Connection to Network	connector BNC female		
Standards compliance	IEC 61643-21 / EN 61643-21		
Mechanical characteristics			
Dimensions	see diagram		
Mounting	DIN rail or plate (flange)		
Operating temperature	-40/+85°C		
Protection rating	IP20		
Housing material	anodized aluminum		
Part number	420403	420402	420401

Surge protector for Video Survey Camera

MSP-VM series

- **Security camera Surge Protector**
- **AC, Data and Video in single unit**
- **Compact aluminium housing**
- **Rail DIN mounting or plate mounting**
- **3 versions :**
 - **AC + Coaxial Video + Data 1 pair : MSP-VMxx**
 - **AC + Coaxial Video + Data 2 pairs : MSP-VMxx-2P**
 - **AC + Cat.5 - RJ45 : MSP-VMxx/R**
- **IEC 61643-21 and EN 61643-21 compliance**

MSP-VM-2P Range				MSP-VM/R range			
MSP-VM12-2P	MSP-VM24-2P	MSP-VM120-2P	MSP-VM230-2P	MSP-VM12/R	MSP-VM24/R	MSP-VM120/R	MSP-VM230/R
Surge protector for video survey camera Power/Data/Video				Surge protector for video survey camera Power/data			
12 Vac/Vdc	24 Vac/Vdc	120 V single phase	230 V single phase	12 Vac/Vdc	24 Vac/Vdc	120 V single phase	230 V single phase
-	-	TT-TN	TT-TN	-	-	TT-TN	TT-TN
CM/DM	CM/DM	CM/DM	CM/DM	CM/DM	CM/DM	CM/DM	CM/DM
15 Vac/Vdc	30 Vac/Vdc	150 Vdc	255 Vdc	15 Vac/Vdc	30 Vac/Vdc	150 Vdc	255 Vdc
5 A	5 A	5 A	5 A	5 A	5 A	5 A	5 A
None	None	None	None	None	None	None	None
5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
10 kA	10 kA	10 kA	10 kA	10 kA	10 kA	10 kA	10 kA
10 kV/5 kA	10 kV/5 kA	10 kV/5 kA	10 kV/5 kA	10 kV/5 kA	10 kV/5 kA	10 kV/5 kA	10 kV/5 kA
0.22 kV	0.22 kV	0.8 kV	1.2 kV	0.22 kV	0.22 kV	0.8 kV	1.2 kV
Green LED OFF and line cut-off				Green LED OFF and line cut-off			
screw terminal 2.5 mm ² max				screw terminal 2.5 mm ² max			
IEC 61643-11 / EN 61643-11 / UL1449 ed.4				IEC 61643-11 / EN 61643-11 / UL1449 ed.4			
2 pairs signal 0-5 V	2 pairs signal 0-5 V	2 pairs signal 0-5 V	2 pairs signal 0-5 V	4 pairs signal 0-5 V	4 pairs signal 0-5 V	4 pairs signal 0-5 V	4 pairs signal 0-5 V
8 Vdc	8 Vdc	8 Vdc	8 Vdc	8 Vdc	8 Vdc	8 Vdc	8 Vdc
300 mA	300 mA	300 mA	300 mA	300 mA	300 mA	300 mA	300 mA
16 MHz	16 MHz	16 MHz	16 MHz	16 MHz	16 MHz	16 MHz	16 MHz
< 1dB	< 1dB	< 1dB	< 1dB	< 1dB	< 1dB	< 1dB	< 1dB
2.5 kA	2.5 kA	2.5 kA	2.5 kA	2.5 kA	2.5 kA	2.5 kA	2.5 kA
5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
20 V	20 V	20 V	20 V	20 V	20 V	20 V	20 V
interruption of transmission				interruption of transmission			
screw terminal 1.5 mm ² max				RJ45 shielded			
IEC 61643-21 / EN 61643-21				IEC 61643-21 / EN 61643-21			
signal video	signal video	signal video	signal video	-	-	-	-
6 Vdc	6 Vdc	6 Vdc	6 Vdc	-	-	-	-
300 mA	300 mA	300 mA	300 mA	-	-	-	-
100 MHz	100 MHz	100 MHz	100 MHz	-	-	-	-
< 1dB	< 1dB	< 1dB	< 1dB	-	-	-	-
5 kA	5 kA	5 kA	5 kA	-	-	-	-
10 kA	10 kA	10 kA	10 kA	-	-	-	-
20 V	20 V	20 V	20 V	-	-	-	-
interruption of transmission				interruption of transmission			
connector BNC female				connector BNC female			
IEC 61643-21 / EN 61643-21				IEC 61643-21 / EN 61643-21			
see diagram				see diagram			
DIN rail or plate (flange)				DIN rail or plate (flange)			
-40/+85°C				-40/+85°C			
IP20				IP20			
anodized aluminum				anodized aluminum			
420433	420432	420434	420431	420413	420412	420414	420411