

MSP-VM SERIES



MSP-VM120-2P

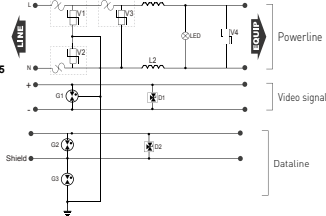
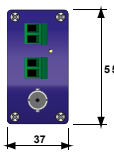
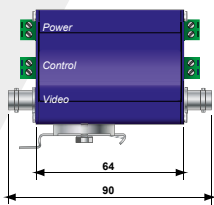


MSP-VM24

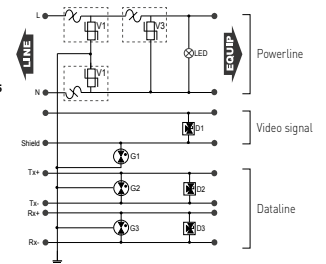
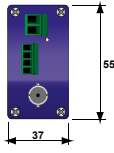
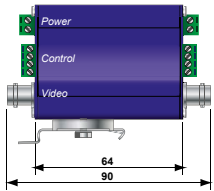


MSP-VM120-R

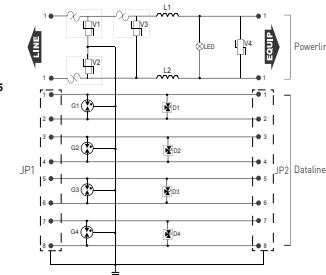
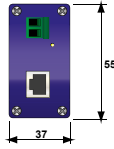
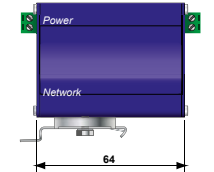
MSP-VM



MSP-VM-2P



MSP-VM-R

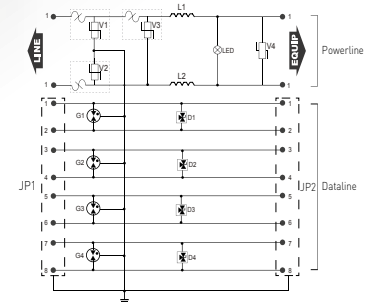
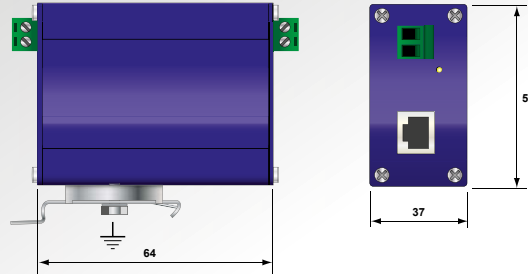


D : Clamping diode
G : Gas tube
V : Varistor
LED : Indicator
L : Inductor

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. operating voltage	Uc 15 Vac/Vdc	30 Vac/Vdc	255 Vac
Max. Load current	IL 5 A	5 A	5 A
Residual current <i>Leakage current at Uc</i>	Ic None	None	None
Nominal discharge current	In 5 kA	5 kA	5 kA
Max. discharge current <i>max. withstand @ 8/20 μs by pole</i>	I _{max} 10 kA	10 kA	10 kA
Withstand on Combination waveform <i>Class III test</i>	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
End of life	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	1 pair signal 0-5 V	1 pair signal 0-5 V
Max. 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 <i>max. withstand @ 8/20 μs by pole</i>	I _{max} 5 kA	5 kA	5 kA
Protection level	Up 20 V	20 V	20 V
End of life	interruption of transmission - default mode 2		
Connection to Network	screw terminal 1.5 mm ² max		
Standards compliance	IEC 61643-21 / EN 61643-21		
Videoline specifications			
Network	signal video	signal video	signal video
Max. 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 <i>max. withstand @ 8/20 μs by pole</i>	I _{max} 10 kA	10 kA	10 kA
Protection level	Up 20 V	20 V	20 V
End of life	interruption of transmission - default mode 2		
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/R Series



V : Varistor
LED : Status indicator
D : Clamping diode network
G : Gas tube
L : Inductor

- Security camera Surge Protector
- AC + Ethernet 100Base-TX (RJ45 connector)
- Compact aluminium housing
- Rail DIN mounting or plate mounting

Characteristics

CITEL Model	MSP-VM/R range			
	MSP-VM12/R	MSP-VM24/R	MSP-VM120/R	MSP-VM230/R
Description	Surge protector for video survey camera Power/data			
AC power specifications				
Network	12 Vac/Vdc	24 Vac/Vdc	120 V single phase	230 V single phase
AC system	-	-	TT-TN	TT-TN
Protection mode(s)	CM/DM	CM/DM	CM/DM	CM/DM
Max. operating voltage	Uc 15 Vac/Vdc	30 Vac/Vdc	150 Vdc	255 Vac
Max. Load current	IL 5 A	5 A	5 A	5 A
Residual current <i>- Leakage current at Uc</i>	Ic None	None	None	None
Nominal discharge current	In 5 kA	5 kA	5 kA	5 kA
Max. discharge current <i>-max. withstand @ 8/20 µs by pole</i>	Imax 10 kA	10 kA	10 kA	10 kA
Withstand on Combination waveform <i>- Class III test</i>	Uoc 10 kV/5 kA	10 kV/5 kA	10 kV/5 kA	10 kV/5 kA
Protection level	Up 0.22 kV	0.22 kV	0.8 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	4 pairs Ethernet 100Base-TX	4 pairs Ethernet 100Base-TX	4 pairs Ethernet 100Base-TX	4 pairs Ethernet 100Base-TX
Max. DC operating voltage	Uc 8 Vdc	8 Vdc	8 Vdc	8 Vdc
Max. Load current	IL 300 mA	300 mA	300 mA	300 mA
Max. frequency	f max 125 MHz	125 MHz	125 MHz	125 MHz
Insertion loss	< 1dB	< 1dB	< 1dB	< 1dB
Nominal discharge current	In 2.5 kA	2.5 kA	2.5 kA	2.5 kA
Max. discharge current <i>-max. withstand @ 8/20 µs by pole</i>	Imax 5 kA	5 kA	5 kA	5 kA
Protection level	Up 20 V	20 V	20 V	20 V
Disconnection indicator	interruption of transmission			
Connection to Network	RJ45 shielded			
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	420413	420412	420414	420411



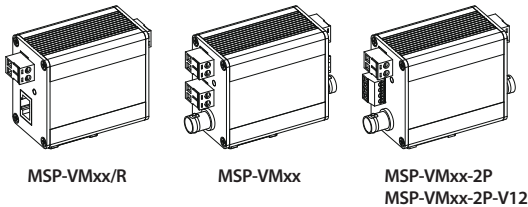
CITEL

N121013c

INSTALLATION INSTRUCTIONS - NOTICE D'INSTALLATION
 NOTICIA DE INSTALACIÓN - INSTALLATIONSHINWEISE
 ISTRUZIONI PER L'INSTALLAZIONE
 INSTRUCOES DE INSTALACAO - MONTÁŽNÍ NÁVOD
 РУКОВОДСТВО ПО МОНТАЖУ - 安装指导书

Dataline surge protector
 Parafoudres pour lignes de données
 Protección para líneas datos
 Überspannungsschutz für datentechnik
 Protezione per linee dati
 Protector de Surto para linha de datos

MSP-VM Series

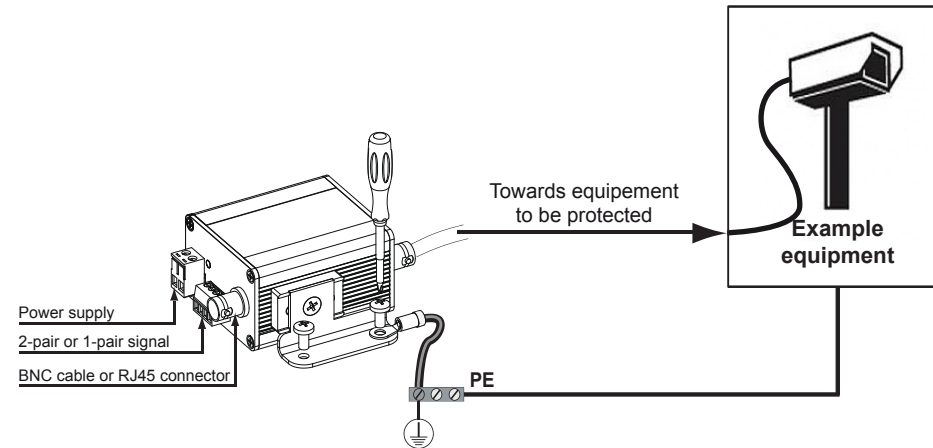


Technical Data

	P/N										
	MSP-VM12/R	MSP-VM24/R	MSP-VM120/R	MSP-VM230/R	MSP-VM12	MSP-VM24	MSP-VM230	MSP-VM12-2P	MSP-VM24-2P	MSP-VM120-2P	MSP-VM230-2P
2000 m max. 6500 ft max.	●										
-40/+85°C max. -40/+185°F max.	●										
indoor use only	●										
Un / Uc											
12 Vac / 15 Vdc	●				●			●			
24 Vac / 30 Vdc		●				●			●		●
50 Vac / 65 Vdc										●	
120 Vac / 150 Vdc			●							●	
230 Vac / 255 Vdc				●			●				●
Degree of protection	IP20										

Table 1

Application example



Installation - Grounding

Mounting and bonding on DIN-rail	Mounting and bonding with bracket	Mounting and bonding by wire
<p>Clip on symmetrical DIN rail</p> <p>DIN-rail</p>	<p>Bracket</p>	<p>1</p> <p>2 press cable shoe together</p> <p>3</p>

WIRING

LOCATION : SPDs should preferably be placed at the entrance of the installation and as close as possible to the sensitive equipment (<< 10 m).

GROUNDING : to reduce the residual voltages, the connection of the protector to the bounding network must be as short as possible (less than 50cm) and has a proper cross section (at least 12AWG).

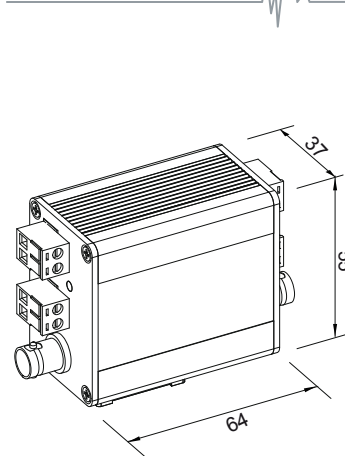
WIRING : The SPD is connected in series on the lines. External lines must be connected on "LINE" side. Equipment to be protected must connected on "EQUIP" side.

- Power terminal wire range : 28-12AWG. And data line terminal wire range: 28-16AWG.

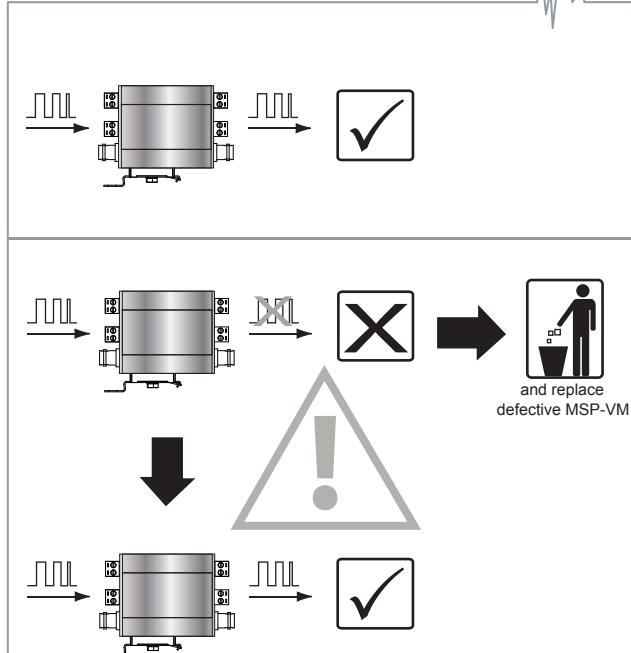
- Video connector : BNC or RJ45

Table 2

Dimensions



Maintenance





CITEL

SAFETY INSTRUCTIONS
 CONSIGNES DE SECURITE
 SICHERHEITSHINWEISE
 ADVERTENCIA DE SEGURIDAD
 AVVERTENZE IMPORTANTI
 AVISOS IMPORTANTES
 МЕРЫ БЕЗОПАСНОСТИ
 BEZPEČNOSTNÍ POKYNY

安全須知



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2, rue Troyon 92316 Sèvres CEDEX France



ATTENTION !

GB

- Installation must be performed only by electrically skilled operator.
- National electrical installation rules must be followed.
- The unit must be used only as surge protector and according the conditions described in this document.
- The device must be selected according to the connection and the power (Table 1).
- If the signal is interrupted, then the unit is defect and must be replaced.



ATENCIÓN !

ES

- Solo un operador eléctrico capacitado puede realizar la instalación.
- Las reglas generales nacionales de instalación eléctrica deben ser respetadas.
- El producto solo tiene un uso de protección contra sobretensiones transitorias y debe ser utilizado en las condiciones mencionadas en este documento.
- El dispositivo debe ser seleccionado según la aplicación y la tensión (Tabla 1).
- Si se corta la señal, el modulo esta en estado defectuoso y debe ser sustituido.



ВНИМАНИЕ!

RUS

- монтаж и подключение изделия должны производиться только специалистами-электриками.
- необходимо учитывать требования местных норм и стандартов.
- изделие может использоваться только для защиты от импульсных перенапряжений в соответствии с настоящей инструкцией.
- Устройство нужно выбирать в соответствии с напряжением и видом защищаемой линии (см. таблицу 1).
- При отсутствии сигнала в линии устройство неисправно и должно быть заменено.



ATTENTION !

FR

- L'installation ne doit être effectuée que par un opérateur électricien dûment qualifié.
- Les règles générales d'installation électrique nationales doivent être respectées.
- Le produit est uniquement destiné à un usage parafoudre et doit être utilisé dans les conditions décrites dans ce document.
- Le parafoudre doit être choisi en fonction de la connectique et de la puissance (Tableau 1)
- En cas de défaut, la transmission du signal sera interrompue et le parafoudre devra être remplacé.



ATTENZIONE !

IT

- L'installazione deve essere fatta solamente da elettricisti qualificati.
- Devono essere rispettate le regolamentazioni nazionali e locali riguardanti l'installazione di apparati elettrici.
- L'unità deve essere usata solo come protezione da sovratensioni e secondo le condizioni descritte in questo documento.
- Il dispositivo deve essere scelto secondo l'applicazione e la tensione (quadro 1).
- Se la segnale si interrompe, il modulo è allora difettoso e deve essere cambiato.



VAROVÁNÍ

CZ

- Montáž a připojení svodiče přepětí smí provádět pouze pracovník s příslušnou elektrotechnickou kvalifikací.
- Je zapotřebí dodržovat zásady bezpečnosti práce i platné národní elektrotechnické předpisy.
- Svodič přepětí se smí používat pouze v souladu se svými technickými parametry a podle těchto montážních pokynů.
- Svodič přepětí musí být vybrán podle aplikace a napěťové úrovně (tabulka 1).
- Je-li signál přerušen, je svodič přepětí vadný a musí být vyměněn.



WARNING !

D

- Die Montage und der Anschluss des Gerätes dürfen nur durch eine Elektrofachkraft durchgeführt werden.
- Nationale Installations Vorschriften sind zu beachten.
- Das Gerät ist nur im Rahmen dieser Installationshilfe und seiner technischen Daten zu verwenden.
- Die Ableiter sind entsprechend der Spannung und Anwendung auszusuchen (siehe Tabelle 1).
- Bei Signalunterbrechung ist das SPD defekt. Überprüfen sie den integrierten Gasableiter und tauschen Sie Ihn ggf durch einen neuen aus.



AVISO !

PT

- A instalação deve ser feita por um electricista habilitado.
- Devem ser seguidas todas as regras de segurança indicadas pelo operador eléctrico.
- Esta protecção deve ser utilizada apenas como protecção contra sobretensões e de acordo com as condições mencionadas neste documento.
- O dispositivo deve ser selecionado de acordo com a aplicação e a voltagem (tabla 1)
- Se o sinal estiver cortado, o módulo está então defeituoso e deve ser substituído



安全須知!

中文

- 产品安装只能由具备专业资质的人员实施;
- 请遵守国家电气安装相关规范;
- 本产品仅作为浪涌保护器且在本文件所规定的条件下使用;
- 应根据具体应用和工作电压选择器件 (表1)
- 如果信号中断, 则模块已失效, 应予以更换