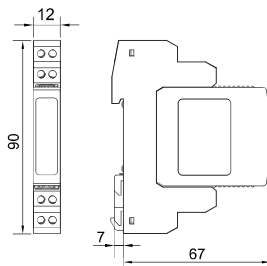




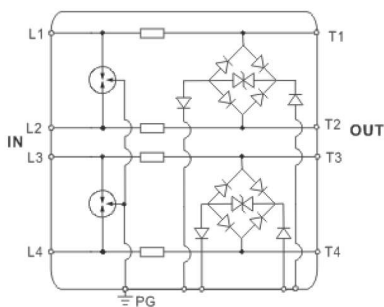
PROSURGE DM.. data network surge arrester are designed for universal 1 or 2-pairs data lines against the damaging from surges and spikes caused by lightning and other electrical sources, suitable for use in category location B, C (ANSI/IEEE C62.41) or directly at the upstream near the protected devices.

- Data network protector in according with UL497b, IEC/EN61643-21
- 12mm pluggable surge protector for DIN-Rail mounting
- Signal transmission is not interrupted when exchanging module
- Two-stage protection circuit. Limit the transients with gas discharge tubes and transzorb diodes
- Earthing is possible on DIN rail
- Different model are suitable to use for universal 4-20mA current loop, TTL, analog telephone line, measurement system and high-frequency bus and data transmission systems etc

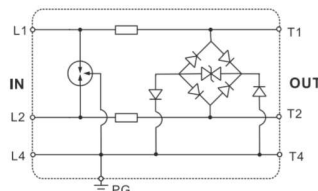


Model		DM-05-M2N1	DM-12-M2N1	DM-24-M2N1	DM-48-M2N1	DM-110-M2N1
		DM-05-M4N1	DM-12-M4N1	DM-24-M4N1	DM-48-M4N1	
Lines protected		1-Pair / 2-Pair				1-Pair
Nominal voltage (vdc) Un		5V	12V	24V	48V	110V
Max. continuous operating voltage (vdc/vac) Uc		6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V	170V/120V
C2 nominal discharge current (8/20μs) In		10kA				
Lightning Impulse current (10/350μs) Iimp		2.5kA				
Voltage protection level	@C2 (8/20μs) Up	30V(L-L); 30V(L-G)	45V(L-L); 45V(L-G)	55V(L-L); 55V(L-G)	100V(L-L); 100V(L-G)	300V(L-L); 300V(L-G)
	@C3 (1KV/μs) Up	24V(L-L); 24V(L-G)	38V(L-L); 38V(L-G)	48V(L-L); 48V(L-G)	75V(L-L); 75V(L-G)	250V(L-L); 250V(L-G)
Rated load current IL		1A				
Cut-off frequency fG		100 MHZ				
Series impedance per line R		0.68 Ω				

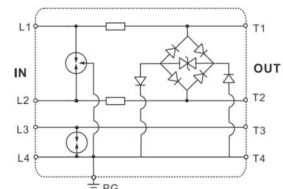
Basic circuit diagram



For 2-pair data line
DM-.../M4N1



For 1-pair data line
DM-.../M2N1



For 1-pair+shield data line
DM-.../M2N3



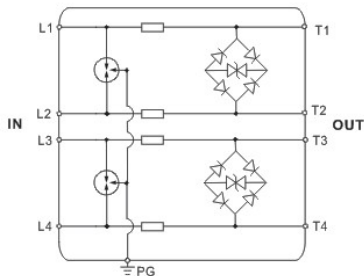
SPDs for Information System

Data Line Protector

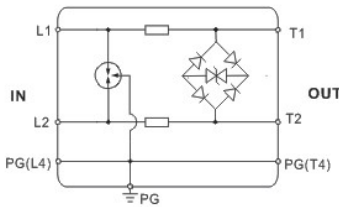
DM

ProSurge®
Maximum Safety in Surge Protection

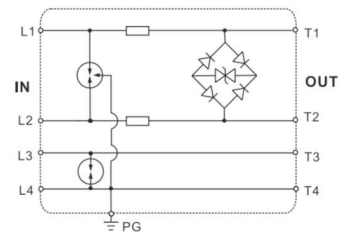
Model	DM-05-M2N2	DM-12-M2N2	DM-24-M2N2	DM-48-M2N2	DM-110-M2N2
	DM-05-M4N2	DM-12-M4N2	DM-24-M4N2	DM-48-M4N2	
Lines protected	1-Pair / 2-Pair				1-Pair
Nominal voltage (vdc) Un	5V	12V	24V	48V	110V
Max. continuous operating voltage (vdc/vac) Uc	6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V	170V/120V
C2 nominal discharge current (8/20μs) In	10kA				
C2 Total nominal discharge current (8/20μs)	20kA				
Lightning Impulse current (10/350μs) Iimp	2.5kA				
Voltage protection level	@C2 (8/20μs) Up	30V(L-L); 500V(L-G)	45V(L-L); 500V(L-G)	55V(L-L); 500V(L-G)	100V(L-L); 500V(L-G)
	@C3 (1kV/μs) Up	24V(L-L); 600V(L-G)	38V(L-L); 600V(L-G)	48V(L-L); 600V(L-G)	75V(L-L); 600V(L-G)
Rated load current IL	1A				
Cut-off frequency fG	100 MHz				
Series impedance per line R	0.68 Ω				



For 2-pair data line
DM-.../M4N2



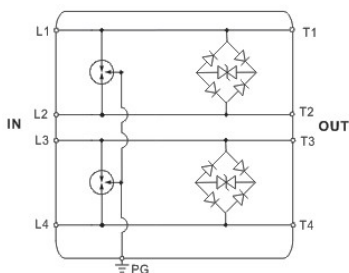
For 1-pair data line
DM-.../M2N2



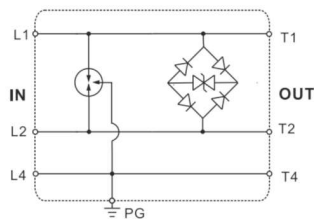
For 1-pair+shield data line
DM-.../M2N4

Model	DM-05-M2N6	DM-12-M2N6	DM-24-M2N6	DM-48-M2N6
	DM-05-M4N6	DM-12-M4N6	DM-24-M4N6	DM-48-M4N6
Lines protected	1-Pair / 2-Pair			
Nominal voltage (vdc) Un	5V	12V	24V	48V
Max. continuous operating voltage (vdc/vac) Uc	6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V
C2 nominal discharge current (8/20μs) In	10kA			
C2 Total nominal discharge current (8/20μs)	20kA			
Lightning Impulse current (10/350μs) Iimp	2.5kA			
Voltage protection level	@C2 (8/20μs) Up	30V(L-L); 500V(L-G)	45V(L-L); 500V(L-G)	55V(L-L); 500V(L-G)
	@C3 (1kV/μs) Up	24V(L-L); 600V(L-G)	38V(L-L); 600V(L-G)	48V(L-L); 600V(L-G)
Rated load current IL	2A			
Cut-off frequency fG	100 MHz			
Series impedance per line R	0 Ω			

Basic circuit diagram



For 2-pair data line
DM-.../M4N6

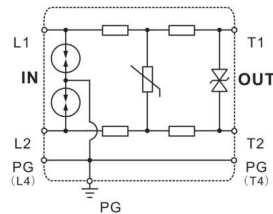


For 1-pair data line
DM-.../M2N6



Model	DM-12/M2N5	DM-24/M2N5	DM-48/M2N5	DM-110/M2N5
Lines protected	1-Pair			
Nominal voltage (vdc) Un	12V	24V	48V	110V
Max. continuous operating voltage (vdc/vac) Uc	15V/10.6V	33V/23.3V	54V/38.1V	170V/120V
C2 nominal discharge current (8/20μs) In	10kA			
C2 total nominal discharge current (8/20μs)	20kA			
Lightning Impulse current (10/350μs) Iimp	2.5kA			
Voltage protection level	@C2 (8/20μs) Up	25V(L-L); 750V(L-G)	50V(L-L); 750V(L-G)	100V(L-L); 750V(L-G)
	@C3 (1kV/μs) Up	19V(L-L); 650V(L-G)	45V(L-L); 650V(L-G)	70V(L-L); 650V(L-G)
Rated load current IL	1A			
Cut-off frequency fG	2 MHz			
Series impedance per line R	1.36 Ω			

■ Basic circuit diagram



For 1-pair data line

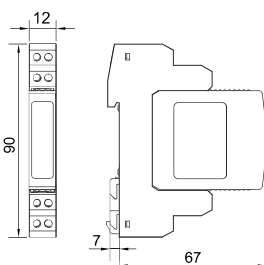
DM-../M..N7 data network protector is with **failure indication and fault-current** protection inside to make protection module replacement timely and prevent failure or even destruction of signal or communication system. These modules are suitable for digital I/O signal or analog power surge protection.



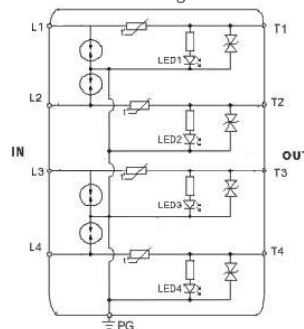
Model	DM-05/M4N7	DM-12/M4N7	DM-24/M4N7	DM-48/M4N7
Lines protected	2-Pair			
Nominal voltage (vdc) Un	5V	12V	24V	48V
Max. continuous operating voltage (vdc/vac) Uc	6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V
C2 nominal discharge current (8/20μs) In	10kA			
C2 total nominal discharge current (8/20μs)	20kA			
Lightning Impulse current (10/350μs) Iimp	2.5kA			
Voltage protection level	@C2 (8/20μs) Up	30V(L-L); 500V(L-G)	45V(L-L); 500V(L-G)	55V(L-L); 500V(L-G)
	@C3 (1kV/μs) Up	24V(L-L); 600V(L-G)	38V(L-L); 600V(L-G)	48V(L-L); 600V(L-G)
Rated load current IL	1A			
Cut-off frequency fG	2 MHz			
Series impedance per line R	PTC			



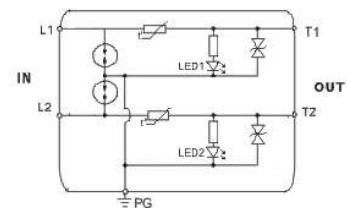
■ Dimension drawing



■ Basic circuit diagram



For 2-pair data line
DM-../M4N7



For 1-pair data line
DM-../M2N7