

# RSP-1M1-DIN

Surge protector for LAN Ethernet networks



- Industrial single-track surge protector for industrial Ethernet networks in structured cabling systems.
- DIN rail mounting. Grounding via DIN rail.
- Discharge element: Gas discharge tubes GDT with TVS diodes (Transient Voltage Suppression Diode)
- Certifications, directives: RoHS,

CAT6 Ethernet surge protector is designed for protecting Gigabit Ethernet terminals or RJ45/Ethernet cable system against surges. The unit is fulfilling the requirements of Category 6, can be universally used for all data services with nominal voltages of 5V. It is ideally suited for Gigabit Ethernet such as Industrial Networks and Local Area Networks (LANs), also for Telecom, ATM, ISDN, Voice over IP and similar applications in structured cabling systems according to Class E up to 250 MHz. All lines are protected by powerful 3-pole gas tubes and fast clamping diodes.

- Suitable for CAT5/CAT5E/CAT6/CAT6A cabling system up to 250MHz.
- High discharge capability, total nominal discharge current 10kA 8/20 $\mu$ s and Lightning current up to 1.0kA.
- EMI Shielded housing, earthing via DIN Rail (or grounding screw optional).
- DIN Rail mounting (or flange).
- Compatible with EN 50173, ISO/IEC 11801

## Technical parameters

Discharge current (8/20 $\mu$ s)	$I_n$	2,5 kA
Total discharge current (8/20 $\mu$ s)	$I_n$	10 kA
Impulse discharge current (10/350 $\mu$ s)	$I_{imp}$	1 kA
Safety channel construction		two stage protection circuit GDT/TVS
Nominal voltage	$U_n$	5
Max. Continuous operating voltage	$U_c$	6
Transmission rate	<b>bps</b>	10/100/1000
Limit voltage	$U_p$	@C2 (8/20 $\mu$ s) 55V(L-L); 550V(L-G) @C3 (1KV/ $\mu$ s) 25V(L-L); 500V(L-G)
Category of connection		CAT5/CAT5E/CAT6/CAT6A cabling system up to 250MHz
Response time		$\leq 1$ ns
Insertion lose		$\leq 3$ dB
Number of slots RJ45		1
Certification according to standard		IEC/EN 61643-21
Standards compliance		EN 50173, ISO/IEC 11801
Dimensions L $\times$ W $\times$ H / Weight		66 $\times$ 40 $\times$ 25 mm / 75 g

## Basic circuit diagram for one channel RJ45

