

SPD for Category 6 LAN Networks
RayDat NET 6
D1 • C1 • C2 • C3



IEC/EN Category: D1/C1/C2/C3
 Protection: All 4 Pairs
 Voltages: 48V DC
 Maximum Operating Voltage: 50V
 Frequency Range: 250 MHz, up to Cat 6, PoE Compatible
 Surge Discharge Ratings: I_n : 10kA, I_{imp} : 1kA
 Enclosure: UTB In-line Patch, DIN Rail Mount
 Terminals: RJ45, Shielded
 Housing: Compact Design
 Compliance: IEC/EN 61643-21

The RayDat NET 6 is intended to protect Local Area Networks (LAN) from overvoltage surges and electrostatic discharges created by switching transients in buildings. LAN systems are particularly prone to such disturbances because long cable lengths often behave like antennas to such atmospheric disturbances.

It provides protection to all 4 lines in the UTP, STP and is Cat 6 capable.

Ground potential equalization between signal and protective network or PC chassis ground is provided.

Product is designed to fulfill all versions of PoE applications compatible with standards IEEE 802.3af and IEEE 802.3at.

Technical Data

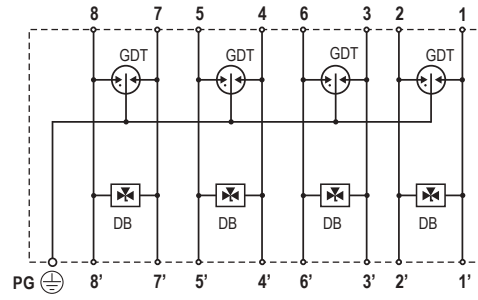
NET 6		48V
Electrical		
Number of Protected Pairs		4 Pairs (8 Conductors)
Nominal Operating Voltage (DC)	U_n	48V
Maximum Continuous Operating Voltage (DC)	(Line-Line) U_c	50V
	(Pair-Pair)	72V
Rated Load Current at 25°C	I_L	1 A
Nominal Discharge Current (8/20 μs)	(Line-Line) I_n	150A
C2 Total Discharge Current (8/20 μs)	(Lines-Ground) I_n	10kA
D1 Impulse Current (10/350 μs)	I_{imp}	1 kA
Voltage Protection Level at I_n	(Line-Line) U_p	150V
	(Line-Ground)	550V
Response Time Overvoltage Protection	t_A	< 1 ns
Cut-off Frequency	f_G	250 MHz
Mechanical		
Temperature Range		-40 °C to +80 °C
Connection Type		Input/Output: RJ45 Sockets
Degree of Protection IEC/EN 60529		IP 20
Housing Material		Metal
Mounting IEC/EN 60715		35 mm DIN Rail
Order Information		
Order Code		48V
NET 6		706 312

RayDat NET 6

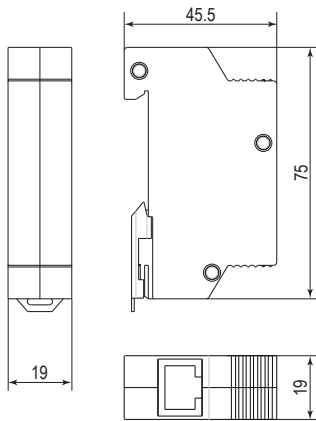
Internal Configuration

Legend

- DB Diode Block
- GDT Gas Discharge Tube
- PG Protective Grounding



Dimensions & Packaging



NET 6

48V

Dimensions

Weight per Unit	120 g
Dimensions DIN 43880	19 mm
Packaging Dimensions (Single Unit)	78 × 23 × 108 mm
Minimum Package Quantity	12 pieces