

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

UL Listed



IEC/EN Category: D1/C1/C2/C3
 Protection: All 4 Pairs
 Voltages: 48V DC
 Maximum Operating Voltage: 50V
 Frequency Range: 250MHz, 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
 UL 497B 4th Edition

The RayDat NET 6 POE 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, IEEE 802.3at and IEEE 802.3bt.

Technical Data

NET 6 POE

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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 μ s)	(Line-Line) I_n	150A
C2 Total Discharge Current (8/20 μ s)	(Lines-Ground) I_n	10kA
D1 Impulse Current (10/350 μ s)	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	250MHz

Mechanical

Temperature Range	-40 °F to +176 °F [-40 °C to +80 °C]
Connection Type	Input/Output: RJ45 Sockets
Degree of Protection IEC/EN 60529	IP 20 (built-in)
Housing Material	Metal
Mounting IEC/EN 60715	35mm DIN Rail

Order Information

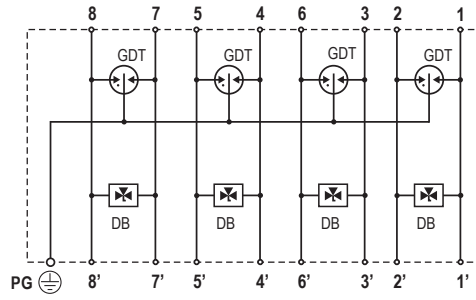
Order Code	48
NET 6 POE	706 312

RayDat NET 6 POE

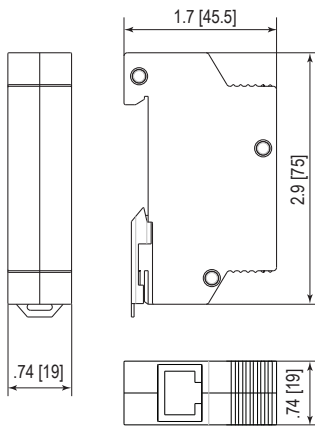
Internal Configuration

Legend

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



Dimensions & Packaging



NET 6 POE

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Dimensions

Weight per Unit	4.23 oz [120g]
Dimensions DIN 43880	.74" [19mm]
Packaging Dimensions (Single Unit)	3.1 x .91 x 4.3" [78 x 23 x 108mm]
Minimum Package Quantity	12 pieces

inches
[mm]

Information contained in this document is subject to change at any time without notice.



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