



IEC/EN Category: D1/C1/C2/C3

Protection: All 4 Pairs

Voltages: 48 V DC

Maximum Operating

Voltage: 50 V

Frequency Range: 250 MHz, up to Cat 6, PoE Compatible

Surge Discharge Ratings:  $I_n$ : 10 kA,  $I_{imp}$ : 1 kA

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****48****Electrical**

Number of Protected Pairs		4 Pairs (8 Conductors)
Nominal Operating Voltage (DC)	$U_n$	48 V
Maximum Continuous Operating Voltage (DC)	(Line-Line) $U_c$	50 V
	(Pair-Pair)	72 V
Rated Load Current at 25°C	$I_L$	1 A
Nominal Discharge Current (8/20 $\mu$ s)	(Line-Line) $I_n$	150 A
C2 Total Discharge Current (8/20 $\mu$ s)	(Lines-Ground) $I_n$	10 kA
D1 Impulse Current (10/350 $\mu$ s)	$I_{imp}$	1 kA
Voltage Protection Level at $I_n$	(Line-Line) $U_p$	150 V
	(Line-Ground)	550 V
Response Time Overvoltage Protection	$t_A$	< 1 ns
Cut-off Frequency	$f_G$	250 MHz

**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	35 mm DIN Rail

**Order Information**

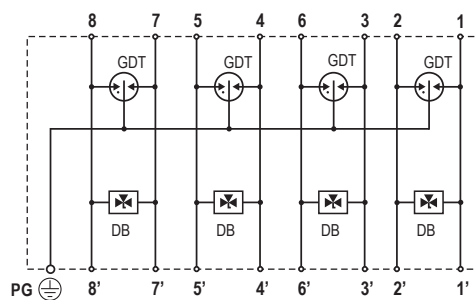
Order Code	48
NET 6 POE	706 312

## RayDat NET 6 POE

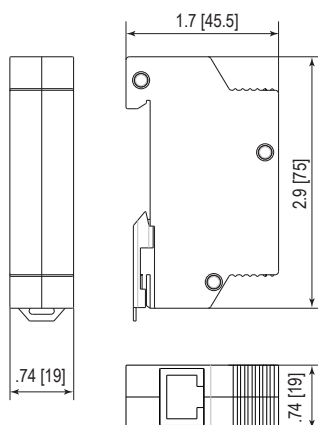
### Internal Configuration

#### Legend

DB Diode Block  
GDT Gas Discharge Tube  
PG Protective Grounding



### Dimensions & Packaging



#### NET 6 POE

48

#### Dimensions

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

inches  
[mm]

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

RoHS COMPLIANT   

**Raycap**

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