

SPD for Category 5 LAN Networks

RayDat NET 5 Series

C1 • C2 • C3



IEC/EN Category: C1/C2/C3 (see Technical Data)
 Protection: All 4 Pairs
 Voltages: 5, 48 V DC
 Maximum Operating Voltage: 6, 58 V DC
 Frequency Range: 100 MHz, Cat 5, PoE Compatible
 Surge Discharge Ratings: I_n : up to 300 A per Line
 Enclosure: UTB In-line Patch
 Termination: RJ45, Cat 5 Connectors
 Housing: Compact Design
 Compliance: IEC/EN 61643-21

The RayDat NET 5 Series 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 and is Cat 5 capable. Ground potential equalization between signal and protective network or PC chassis ground is provided.

PoE version RayDat NET 5 PoE is designed to fulfill all versions of PoE applications compatible with standards IEEE 802.3af and IEEE 802.3at.

Technical Data

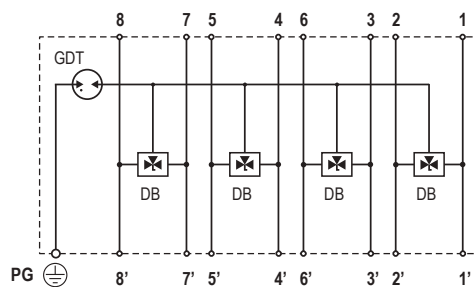
NET 5		NET 5	NET 5 PoE	NET 5 STP
Electrical				
Type per IEC/EN 61643-21		C1/C2/C3	C1/C3	C1/C2/C3
Number of Protected Pairs		4 Pairs (8 Conductors)		
Nominal Operating Voltage (DC)	U_n	5V	48V	5V
Maximum Continuous Operating Voltage (DC)	U_c	6V	58V	6V
C1 Nominal Discharge Current (8/20 μs) (Line-Line)	I_n	300A	60 A	300 A
C2 Total Discharge Current (8/20 μs) (Lines-Ground)	I_{max}	1kA	250 A	1 kA
Voltage Protection Level at I_n	(Line-Line) U_p	35V	150V	35V
	(Lines-Ground)	350V	550V	350V
Response Time Overvoltage Protection	t_A	< 1 ns		
Cut-off Frequency	f_G	100MHz		
Mechanical				
Temperature Range		-40 °C to +80 °C		
Connection Type		Input/Output: RJ45 Sockets		
Degree of Protection IEC/EN 60529		IP20		
Housing Material		Thermoplastic; Grey, Extinguishing Degree V-0		
Order Information				
Order Code		NET 5	NET 5 PoE	NET 5 STP
NET 5 Series		7060.22	7060.23	7060.24

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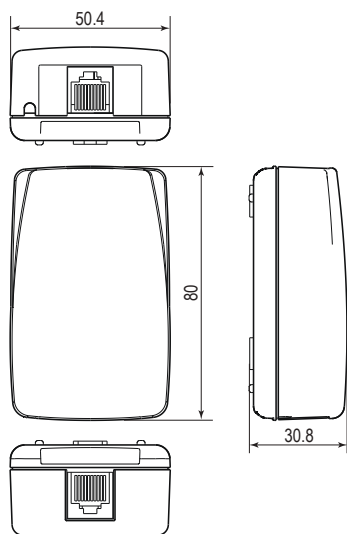
Internal Configuration

Legend

DB Diode Block
GDT Gas Discharge Tube
PG Protective Grounding



Dimensions & Packaging



NET 5	NET 5	NET 5 PoE	NET 5 STP
Dimensions			
Weight per Unit		56 g	
Packaging Dimensions (Single Unit)		55 x 50 x 106 mm	
Minimum Package Quantity		12 pieces	