

# D-LAN-CAT.5-HC Surge Protector

## CAT5/6 Data Line Lightning Surge Protector



- Protection for data interfaces
- Reliable transmission speeds up to 1 Gbps
- Protective adapter for eight signal paths via RJ45 connector (including PoE+)
- Suitable for category 6 high-speed data networks

The D-LAN-CAT.5-HC is a protective adapter to be inserted into the data line for the protection of LAN interfaces and the RJ45 cable.

### Surge protection for information technology

Reliable data is indispensable in today's industry. The sensitive systems used in LANs work with high frequencies at low signal levels and are networked over a wide area. Surge voltages can quickly lead to large-scale failures and, in the worst-case scenario, data loss. Data Line Surge protectors are specifically designed to **protect your investment in expensive wired, wireless and PoE equipment..**

### High-speed data protection

If you need effective **Lightning, RFI, ESD and transient surge protection** for high-speed data transmission, the DT-LAN-CAT.5-HC offers universal protection without affecting the signal at network speeds of up to 1 Gbps.

### Suitable for the following environments

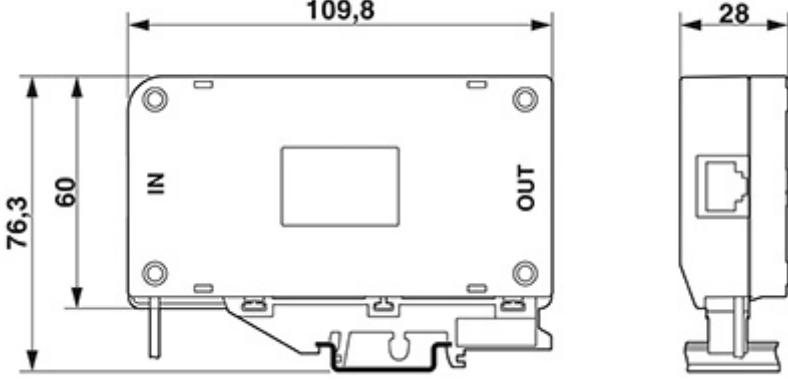
- 10/100/1G-Base-T
- Power over Ethernet (PoE+) "Mode A" and "Mode B"
- TOKEN Ring
- ISDN
- DS1

RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

			Specifications
1 Year Return to Factory Warranty	Reach, RoHS and WEEE Compliant	HTSUS Number: 8535.40.0000	UNSPSC Code: 39121621
			ECCN: 5A991

Ambient Conditions	
Ambient temperature (operation)	-40°C ... 85°C
Ambient temperature (storage/transport)	-40°C ... 85°C
Degree of protection	IP20
Protective circuit	
IEC test classification	<ul style="list-style-type: none"><li>• B2</li><li>• C2</li><li>• D1</li><li>• C1</li></ul>
Maximum continuous operating voltage $U_C$	$\pm 5$ V DC
Maximum continuous voltage $U_C$ (line-line)	$\pm 5$ V DC ( $\pm 57$ V DC/PoE+)
Rated current	$\leq 1.5$ A (25°C)
Operating effective current $I_C$ at $U_C$	$\leq 600$ $\mu$ A
Nominal discharge current $I_n$ (8/20) $\mu$ s (line-line)	350 A
Nominal discharge current $I_n$ (8/20) $\mu$ s (line-ground)	2 kA
Pulse discharge current $I_{imp}$ (10/350) $\mu$ s (line-earth)	1 kA
Total discharge current $I_{Total}$ (8/20) $\mu$ s	8 kA
Nominal pulse current $I_{an}$ (10/700) $\mu$ s (line-line)	$\leq 25$ A
Nominal pulse current $I_{an}$ (10/700) $\mu$ s (line-earth)	$\leq 100$ A
Output voltage limitation at 1 kV/ $\mu$ s (line-line) spike	<ul style="list-style-type: none"><li>• <math>\leq 25</math> V</li><li>• <math>\leq 90</math> V (PoE)</li></ul>
Output voltage limitation at 1 kV/ $\mu$ s (line-earth) spike	$\leq 750$ V

Residual voltage at In (conductor-conductor)	<ul style="list-style-type: none"><li>• <math>\leq 35</math> V</li><li>• <math>\leq 110</math> V (PoE)</li></ul>
Residual voltage at In (conductor-ground)	<ul style="list-style-type: none"><li>• <math>\leq 35</math> V</li><li>• <math>\leq 850</math> V (PoE)</li></ul>
Voltage protection level Up (line-line)	<ul style="list-style-type: none"><li>• <math>\leq 20</math> V (B2 - 1 kV/25 A)</li><li>• <math>\leq 90</math> V (B2 - 1 kV/25 A - PoE)</li><li>• <math>\leq 35</math> V (C1-700 V/350 A)</li><li>• <math>\leq 110</math> V (C1-700 V/350 A-PoE)</li></ul>
Voltage protection level Up (core-ground)	<ul style="list-style-type: none"><li>• <math>\leq 700</math> V (B2 - 4 kV/100 A)</li><li>• <math>\leq 850</math> V (C2 - 4 kV/2 kA)</li></ul>
Response time tA (line-line)	$\leq 1$ ns
Response time tA (line-earth)	$\leq 100$ ns
Input attenuation aE, sym.	<ul style="list-style-type: none"><li>• <math>\leq 0.5</math> dB (100 MHz/100 <math>\Omega</math>)</li><li>• <math>\leq 1</math> dB (100 MHz/100 <math>\Omega</math>/Link Class E)</li></ul>
Near-end crosstalk attenuation	<ul style="list-style-type: none"><li>• typ. 63 dB (1 MHz/100 <math>\Omega</math>/Link Class E)</li><li>• typ. 43 dB (16 MHz/100 <math>\Omega</math>/Link Class E)</li><li>• typ. 30 dB (100 MHz/100 <math>\Omega</math>/Link Class E)</li><li>• <math>&gt; 40</math> dB (100 MHz/100 <math>\Omega</math>)</li></ul>
Cut-off frequency fg (3 dB), sym. in 100 Ohm system	$> 250$ MHz
Capacity (core-core)	typ. 15 pF (f= 1 MHz / VR= 0 V)
Capacity (core-earth)	typ. 5 pF (f= 1 MHz / VR= 0 V)
Impulse durability (conductor-conductor)	<ul style="list-style-type: none"><li>• B2 - 1 kV / 100 A</li><li>• C2-4 kV / 2 kA</li><li>• D1 - 1kA</li></ul>
Impulse durability (conductor-ground)	<ul style="list-style-type: none"><li>• B2 - 4 kV/100 A</li><li>• C2 - 4 kV/2 kA</li><li>• D1 - 1 kA</li></ul>

General	
Color	gray/black
Housing material	PC+ABS
Flammability rating according to UL94	V-0
Dimensions	
Height	109.8 mm
Width	28 mm
Depth	76.3 mm
	
Standards and Regulations	
Standards / specifications	<ul style="list-style-type: none"><li>• VDE 0110-1 / IEC 60664</li><li>• IEC 61643-21/A1 2008</li><li>• EN 61643-21/A1 2009</li><li>• IEC 61643-21 2000</li><li>• GB/T 18802.21 2004</li></ul>
Environmental Product Compliance	
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
Approvals	
	<ul style="list-style-type: none"><li>• UL Listed</li><li>• EAC</li></ul>

Commercial data	
Packing unit	1
Weight per piece	178.0 g (including packaging) 25.0 g (excluding packaging)
Country of origin	CN

## Product List



D-LAN-CAT.5-HC - surge protection device for Ethernet Transmission speeds up to 1G.  
Connection: dual RJ45

### Power Cord & Part Number(s)

None

**28007638**