



Unshielded Symmetric Line Coupling/Decoupling Network

CDN 405T8(POE 10 kV)

- IEC/EN 61000-4-5
- GB/T 17626.5

Features

- > Max. pulse withstand voltage 10 kV
- > Support data transmission rate up to 1,000 Mbit/s
- > Support coupling waveform 1.2/50 μ s, 8/20 μ s; 10/700 μ s, 5/320 μ s
- > Support EMC generators of all brands, quick connection without extra adaptation
- > Superior decoupling, no extra auxiliary protection; plug-and-play to cut setup cost
- > External coupling resistor are replaceable

Introduction

The CDN 405T8 (POE 10 kV) unshielded symmetric line CDN, compliant with IEC 61000-4-5, GB/T 17626.5, is a professional CDN dedicated to lightning surge immunity tests on unshielded symmetrical high-speed (POE) communication lines. With 1,000 Mbit/s transmission rate, it delivers steady, loss-free communication throughout tests to replicate the EUT's real working status, avoiding interference-caused misjudgments and guaranteeing consistent, precise test data.

The CDN 405T8 (POE 10 kV) with excellent decoupling capability can keep the residual voltage at the AE port as low as 200 V under a 10 kV test voltage. It protects auxiliary equipment from influence of interferences and cuts system complexity and improves test efficiency greatly, meeting compliance verification requirements for industrial, railway and other sectors.

Application Areas



Technical Parameters

Coupling Waveform	1.2/50 μ s, 8/20 μ s 10/700 μ s, 5/320 μ s
Pulse Voltage	10 kV
Coupling Method	Line-to-ground: 4-pair (8-wire) unshielded line
Coupling Elements	TVS
Communication Interface Specifications	RJ45 jack for telecommunication line
Pin Assignment	Pair 1: pins 1 / 2 Pair 2: pins 3 / 6 Pair 3: pins 5 / 4 Pair 4: pins 7 / 8
Data Rate	1,000 Mbit/s
Working Voltage	AC 50 V, DC 70 V
Working Current	Max. 1 A
Decoupling Inductor	20 mH
Residual Voltage	<200 V (coupling surge voltage)

General Parameters

Weight	Approx. 41 kg
Dimension	600 (L)*310 (W)*310 (H) mm
Enclosure	Aluminum alloy
Ambient Temperature	15°C ~ 35°C
Relative Humidity	45% ~ 75%
Package	Carton

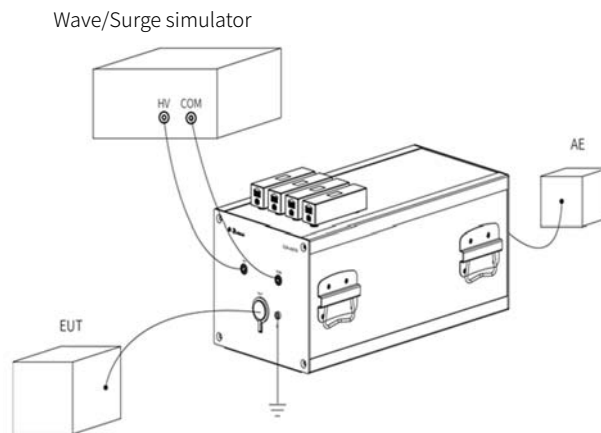
Standard Accessories

Test Cable, Short-circuit Plug, Current-limiting Module, Internet Cable, User Manual

Optional Accesories

1	Wave/Surge Simulator	Model: CWS 1000CT Output Voltage: 0.5 kV ~ 10.0 kV	
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Connection Schematic



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