



Coupling/Decoupling Network for Surge Testing on Unshielded Unsymmetrical Communication Lines **CDN 21AF8**

- ITU-T K.20
- ITU-T K.21
- ITU-T K.44
- ITU-T K.45
- GB/T 17626.5
- YD/T 993

Features

- > Max. peak voltage is 6 kV
- > Max. transmission rate is 10 Mbit/s
- > Compatible with all brands of EMC generators without additional adaptation
- > Excellent decoupling performance, no extra protection required for auxiliary equipment
- > Coupling Waveforms are 1.2/50 μ s and 8/20 μ s
- > Line-to-Line / Line-to-Ground

Introduction

The CDN 21AF8 is designed to couple surge pulses onto 8 lines (4 pairs) unshielded unsymmetrical communication lines for voltage up to 6 kV and max. transmission rate is 10 Mbit/s. It fully meets the requirement of ITU-T K.20, ITU-T K.21, ITU-T K.44, ITU-T K.45, GB/T 17626.5 and YD/T 993.

Data transmission stays stable throughout the test, accurately reproducing the actual communication status of the device, and ensuring repeatable and accurate test results.

Application Areas



Technical
Parameters

Coupling Waveform	1.2/50 μ s, 8/20 μ s
Output Impedance	SZR40 (40 Ω ±5%) (Standard equipped)
Coupling Waveform	10/700 μ s, 5/320 μ s
Output Impedance	SZR0 (0 Ω) (Standard) (The source impedance of generator is 40 Ω)
Impulse Voltage	6 kV (10 kV on request)
Coupling Mode	8 lines (4 pairs) unshielded unsymmetrical L-PE, L-L
Coupling Element	SCD90 (90 V Air Discharge Tube) built-in standard
Communication Port	Female RJ45 Connector, connect with telecom cables
Data Rate	Max. 10 Mbit/s
Operating Voltage	Max. 90 V DC
Operating Current	Max. 1 A
Decoupling Inductance	20 mH
Residual Voltage	90 V (Coupling surge voltage)

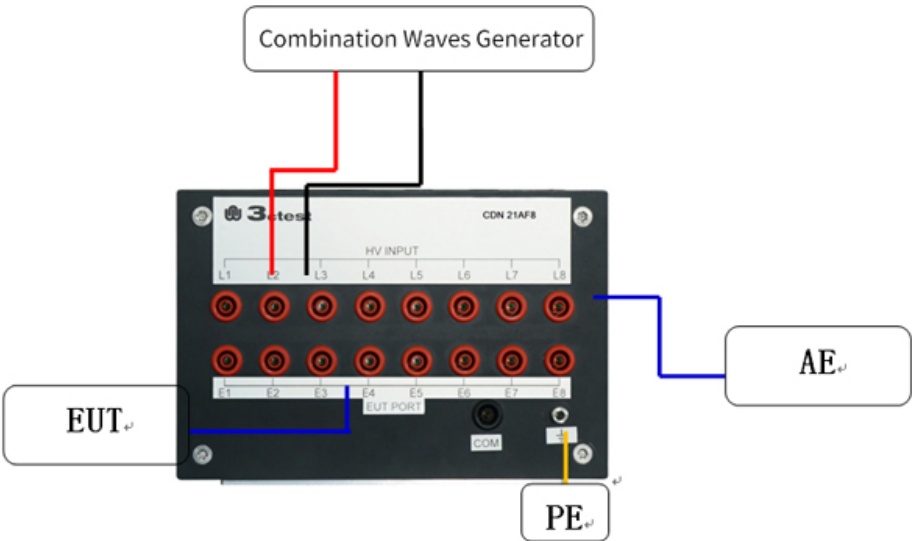
General
Parameters

Weight	Approx. 10 kg
Dimension	360 mm(L) * 220 mm(W) * 135 mm(H)
Enclosure Material	Aluminum
Ambient Temperature	15°C ~ 35°C
Relative Humidity	45% ~ 75%
Package	Carton

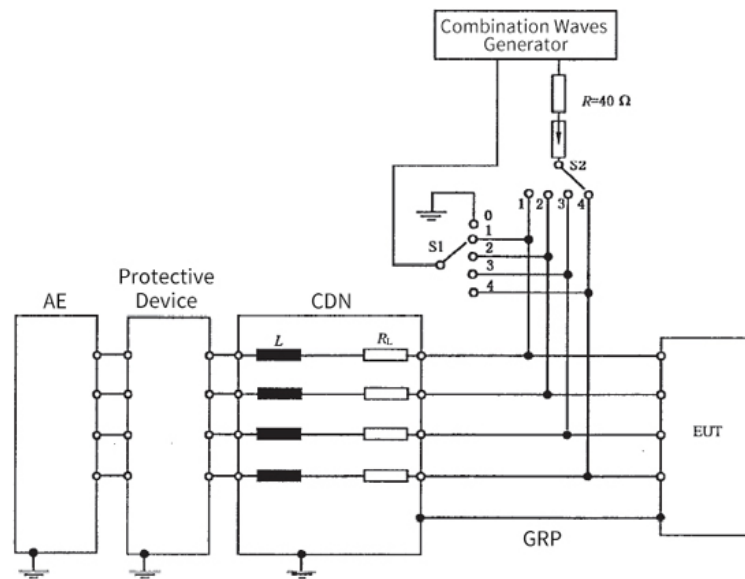
Standard Accessories

Test Cables, Ethernet Cables, Resistance Modules, User Manual

Test Connection
Diagram



Design Diagram



As per IEC 61000-4-5: 2017 Figure 9

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