

# Three-phase surge manual coupling/decoupling network

## CDN-5320M 【Introduction】

The lightning surge coupling/decoupling network, as a key component of the lightning surge/ringing wave test system, directly determines the consistency and repeatability of test results. The power line coupling/decoupling network developed and produced by Lioncel complies with the calibration requirements for output waveforms specified in IEC 61000-4-5 Ed.3, providing accurate assessment means for electromagnetic compatibility immunity testing of products. It is used for the power ports and grounding ports of electrical and electronic equipment subjected to lightning surge interference, with currents up to 100 A and input surge pulses up to 12 kV.

### Compliance Standards

IEC 61000-4-5 Ed.3 EN 61000-4-5 GB/T 17626.5

### Application Fields

New energy vehicles, charging piles, wind power, solar energy, industrial equipment, electrical power meters, automotive electronics, medical devices, lighting appliances, communication transmission equipment, audio-visual equipment, low-voltage electrical appliances, electronic components, electric tools, information technology equipment, railway and aerospace electrical appliances, instrumentation, energy storage, and new energy vehicles..

### Technical Features

- ◆ The standard test line features plug-and-play operation, which is convenient and reliable.
- ◆ It has a high EUT power capacity, compatible with most equipment under test.
- ◆ The lightweight design facilitates mobility to meet testing environment requirements.
- ◆ It is compatible with high-voltage DC testing requirements.
- ◆ It is compatible with products from other brands (requires joint debugging).

### Parameter List

Specification	CDN-5320M-100AC	CDN-5320M-200AC
Type of Interference	Lightning Surge Immunity Test	
Coupled Waveform	1.2 $\mu$ s /50 $\mu$ s 8 $\mu$ s /20 $\mu$ s composite wave	

Voltage Waveform (Differential Mode)	Rise Time: 1.2 $\mu$ s $\pm$ 30% Half-Peak Time : 30 $\mu$ s ~ 60 $\mu$ s	
Voltage Waveform (Common Mode)	Rise Time: 1.2 $\mu$ s $\pm$ 30% Half-Peak Time: 15 $\mu$ s ~ 60 $\mu$ s	
Current Waveform (Differential Mode)	Rise Time: 8 $\mu$ s $\pm$ 20% Half-Peak Time: 20 $\mu$ s $\pm$ 20%	
Current Waveform (Common Mode)	Rise Time: 2.5 $\mu$ s $\pm$ 30% Half-Peak Time: 25 $\mu$ s $\pm$ 30%	
Output Impedance	2 $\Omega$ / 12 $\Omega$	
EUT Circuit Channel	AC Three-phase Five-wire & DC Three-wire	
Circuit Capacity of DUT	AC 900 V&DC 1500 V /100 A MAX	AC 900 V&DC 1500 V /200 A MAX
Peak Input Pulse Voltage	12000 Vp MAX	