



## Coupling/Decoupling Network for Unscreened symmetrical Lines

### CDN RJ45

- IEC 61000-4-6
- EN 61000-4-6
- GB/T 17626.6

#### Features

- > All ports adopt RJ45 ports
- > Specifically designed for 8-wire unscreened balanced lines
- > Max. current rating 1 A, suitable for most industrial and automotive electronic devices
- > Max. signal data rate 1,000 Mbit/s

#### Introduction

CDN RJ45 is a coupling/decoupling network for unscreened balanced lines, intended for conducted immunity tests on various unscreened balanced cables. It complies with IEC 61000-4-6, GB/T 17626.6 and relevant standards, fully meeting performance and cabling specifications for CDNs.

It supports a max. data transmission rate of 1000 Mbit/s and is equipped with RJ45 ports. It ensures stable data transmission during tests, accurately reproduces the actual communication status of devices, and guarantees accurate and repeatable test results. This product helps streamline testing procedures to meet industrial compliance requirements and delivers reliable, credible test data.

#### Application Areas



## Technical Parameters

|                                                                 |                                           |
|-----------------------------------------------------------------|-------------------------------------------|
| Frequency                                                       | 150 kHz ~ 230 MHz                         |
| Max. AC Voltage (L-PE)                                          | 100 V                                     |
| Max. DC Voltage (L-PE)                                          | 150 V                                     |
| Max. Current                                                    | 1 A                                       |
| RF Input (BNC)                                                  | < 20 V                                    |
| EUT Port                                                        | RJ45                                      |
| AE Port                                                         | RJ45                                      |
| Data Rate                                                       | 1,000 Mbit/s                              |
| <b>Common-mode Impedance (EUT)</b>                              |                                           |
| 150 kHz ~ 24 MHz                                                | 150 $\Omega$ $\pm$ 20 $\Omega$            |
| 24 MHz ~ 80 MHz                                                 | 150 $\Omega$ + 60 $\Omega$ / -45 $\Omega$ |
| 80 MHz ~ 230 MHz                                                | 150 $\Omega$ + 60 $\Omega$ / -60 $\Omega$ |
| <b>Voltage Division Factor (RF Input Port - EUT Port)</b>       |                                           |
| 150 kHz ~ 80 MHz                                                | 9.5 dB $\pm$ 1 dB                         |
| 80 MHz ~ 230 MHz                                                | 9.5 dB $\pm$ 2 dB                         |
| <b>Common-mode Disturbance Suppression (RF Input Port / AE)</b> |                                           |
| 150 kHz                                                         | > 60 dB                                   |
| 1.5 MHz                                                         | > 60 dB                                   |
| 30 MHz                                                          | > 50 dB                                   |
| 80 MHz                                                          | > 50 dB                                   |
| 230 MHz                                                         | > 40 dB                                   |

## General Parameters

|                     |                                   |
|---------------------|-----------------------------------|
| Weight              | Approx. 4 kg                      |
| Dimension           | 210 mm(L) * 170 mm(W) * 115 mm(H) |
| Enclosure Material  | Aluminum                          |
| Ambient Temperature | 15°C ~ 35°C                       |
| Relative Humidity   | 45% ~ 75%                         |
| Package             | Carton                            |

## Standard Accessories

Adapter, User Manual

## Optional Accessories

|   |                                     |                                                                                                           |                                                                                       |
|---|-------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | 150 $\Omega$ to 50 $\Omega$ Adapter | Model: CDN 100KIT<br>Insertion Loss: 9.5 dB $\pm$ 0.5 dB<br>Number: 2                                     |  |
| 2 | BNC 50 $\Omega$ Coaxial Terminator  | Model: TF2-1-BNC(J)2W DC-1G<br>Impedance: 50 $\Omega$<br>Power: 2 W<br>Frequency: DC ~ 1 GHz<br>Port: BNC |  |

## **SUZHOU 3CTEST ELECTRONIC CO., LTD.**

---

Address: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

E-mail: [globalsales@3ctest.cn](mailto:globalsales@3ctest.cn)

Service: [service@3ctest.cn](mailto:service@3ctest.cn)

Tel: +86 - 512 - 68077192

Web: [www.3ctest.com](http://www.3ctest.com)



3CTEST is always striving for product innovation and quality improvement. Product appearance and technical specifications are subject to change without further notice.