



CDN USB/C, USB/P

COUPLING / DECOUPLING NETWORK (CDN)

CDN S TYPE







CDN USB/c

- Designed for IEC/EN 61000-4-6
- USB/c for test central devices
- USB/p for test periferal devises

IEC/EN 61000-4-6 specifies the design and performance of a range of coupling/decoupling networks (CDNs). Each CDN is specific to the type of cable and the intended signal carried on the cable. Teseq offers an extensive range of CDNs which fully comply with the requirements of the standard and provide a simple and reliable method of injecting RF energy into the equipment under test (EUT).

Specially designed to test the universal serial bus, now common on most PCs, this CDN is fitted with a USB plug (input and output) and can be used for up to 100 V and up to 1000 mA. Two different types are available as shown in the table below:

| Product name | Line type | Application | Connector EUT port | Connector AE port |
|--------------|---------------|----------------------------|--|--|
| CDN USB/c | USB, screened | USB for central devices | USB "B" type  | USB "A" type  |
| CDN USB/p | USB, screened | USB for peripheral devices | USB "A" type  | USB "B" type  |

Technical specifications CDN USB/c, USB/p

| | |
|--|------------------------------------|
| Frequency range: | 150 kHz to 230 MHz |
| Power rating (EUT- and AE port) | |
| AC max. voltage (line to ground): | 100 V |
| DC max. voltage (line to ground): | 100 V |
| Current max : | 1 A |
| Test voltage: | 200 V DC, 2 sec |
| Common mode impedance (EUT port) | |
| 150 kHz to 26 MHz: | 150 Ω ±20 Ω |
| 26 MHz to 230 MHz: | 150 Ω +60 Ω / -45 Ω |
| Coupling path (In/Out port/EUT) | |
| Connection: | BNC 50 Ω |
| RF voltage: | <20 V |
| Voltage division factor (RF input to EUT port) | |
| 150 kHz to 80 MHz: | 9.5 dB ±1 dB |
| 80 MHz to 230 MHz: | 9.5 dB +3 dB / -2 dB |
| Transmission bandwidth (wanted signal) EUT/AE B3 dB: | > 80 MHz sin. (data pair balanced) |



Advanced Test Solutions for EMC

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USB "A" type:
AE connector of CDN USB/c
EUT connector of CDN USB/p

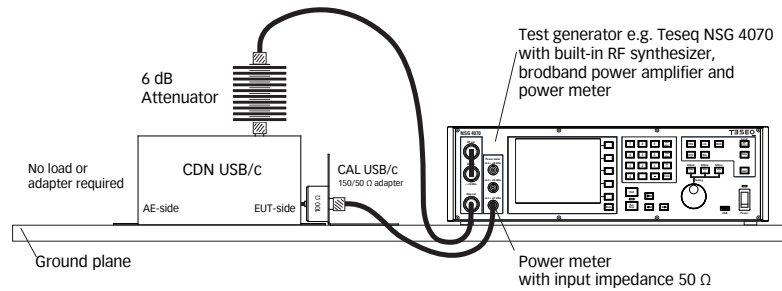
Technical specifications CDN USB/c, USB/p (continued)

| Decoupling of CM disturbance (RF port / AE) | |
|---|--------|
| 150 kHz: | >60 dB |
| 1.5 MHz: | >60 dB |
| 30 MHz: | >50 dB |
| 230 MHz: | >40 dB |

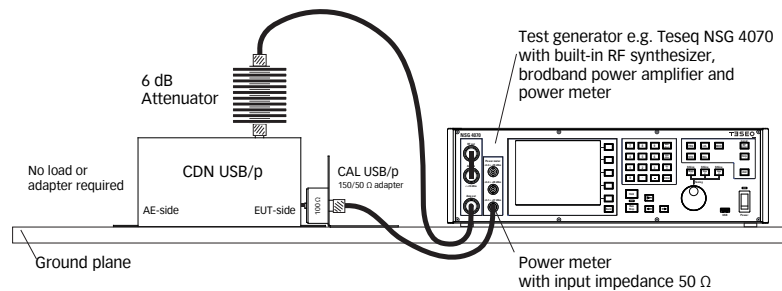
Mechanical specifications

| | |
|-------------------|--------------------------|
| Size (W x H x D): | 100 mm x 100 mm x 240 mm |
| Weight: | approx. 1.5 kg |

Test set-up calibration with CDN USB/c

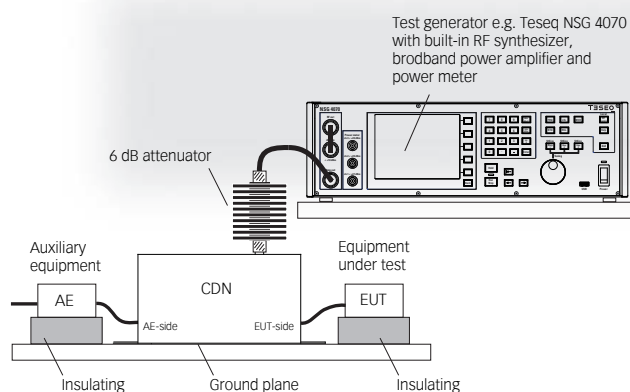


Test set-up calibration with CDN USB/p



CDN USB/C, USB/P COUPLING / DECOUPLING NETWORK (CDN) CDN S TYPE

EUT test set-up



Delivery information

| Part number | Description |
|-------------|---|
| 237501 | CDN USB/c CDN with USB connector (EUT-central device) |
| 244150 | CDN USB/cS CDN with USB connector (EUT-central device) and calibration adapter CAL USB/c in suitcase |
| 237503 | CDN USB/p CDN with USB connector (EUT-peripheral device) |
| 244151 | CDN USB/pS CDN with USB connector (EUT-peripheral device) and calibration adapter CAL USB/p in suitcase |
| 97-231024 | CDN-TC Traceable calibration (ISO17025) for IEC 61000-4-6 requirements, order only with device CDN M, AF, S or T00x type |
| 237577 | CAL USB/c Calibration unit for CDN USB/c |
| 237578 | CAL USB/p Calibration unit for CDN USB/p |