



CDN ST08A

COUPLING / DECOUPLING NETWORK (CDN)

CDN S TYPE



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).

Whilst the published standard only specifies the performance of CDN from 150 kHz to 80 MHz, most of Teseq CDNs are specially designed to give the same performance to a wider frequency range. This is required by some product specific standards.

Each CDN is also useable for emission testing. This type can be used as impedance stabilization network (ISN) defined in CISPR 22.



CDN ST08A

- For testing screened, balanced lines for telecommunication ports on ITE equipment.
- For use with screened RJ45 connections
- Up to 8 lines/ 4 pairs
- Designed for IEC/EN 61000-4-6
- Meets the requirements of CISPR 22, Ed.5.0, Ed.5.2 and Ed.6.0

Technical specifications

Frequency range:	150 kHz to 230 MHz
Line parameters:	4 pairs, balanced, shielded, 100 Ω
Power rating (EUT- and AE Port)	
AC max. voltage:	100 V
DC max. voltage:	150 V
Current max :	1000 mA
Test voltage:	200 VDC, 2 sec
Common mode impedance (EUT Port)	
150 kHz to 30 MHz:	150 Ω ±20 Ω
30 MHz to 230 MHz:	150 Ω +60 Ω /-45 Ω
Phase angle (EUT Port) 150 kHz to 30 MHz:	0° ±20°
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 30 MHz:	9.5 dB ±1 dB
30 MHz to 230 MHz:	9.5 dB +4 dB /-2 dB
Transmission bandwidth (wanted signal) EUT/AE B3 dB: *	> 250 MHz sin.
Decoupling of common mode disturbances (EUT / AE)	
150 kHz to 1.5 MHz:	≥60 dB
1.5 MHz to 30 MHz:	≥60 dB
*) all balanced parameters are in relation to a symmetrical load of 100 Ω	

Mechanical specifications

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



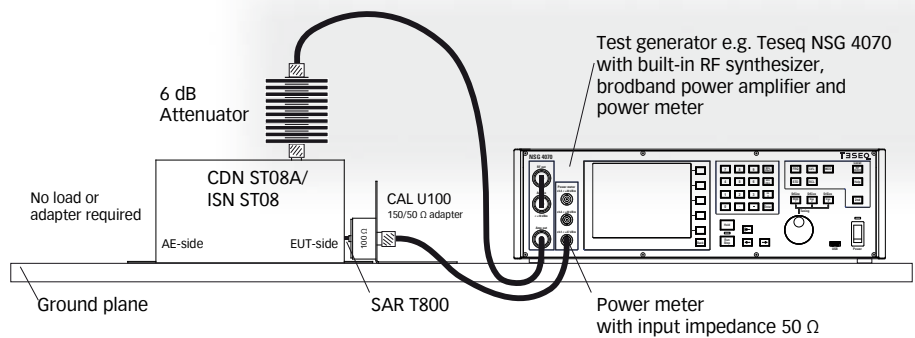
Advanced Test Solutions for EMC

CDN ST08A COUPLING / DECOUPLING NETWORK (CDN) CDN S TYPE

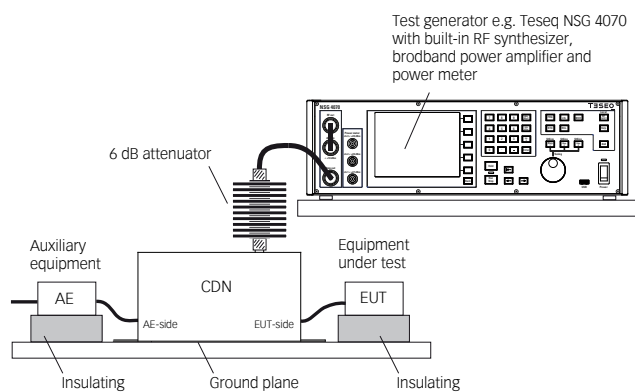
Test set-up calibration with CDN ST08A



CDN ST08A view to RJ45 connection



EUT test set-up



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Delivery information

Part number	Description
242109	CDN ST08A CDN for screened eight lines with RJ45 connector (construction identical with ISN ST08)
242116	CDN ST08AS CDN for screened eight lines with RJ45 connector (construction identical with ISN ST08) with calibration adapter 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
97-248650	ISN Sxxx-TC Traceable calibration (ISO17025), for CISPR 22 requirements, order only with CDN/ISN ST08 or CDN/ISN S501
239901	CAL U100 Universal calibration unit (150 Ω /50 Ω adapter)
242439	SAR T800 Calibration adapter part for CDNs/ISNs with RJ45 connector