



MAIN FEATURES

- For use with coaxial lines
- BNC and N connectors
- Versions with double screened cable
- Meets the requirements of CISPR 22, CISPR 32, CISPR 16-1-2
- Design given in figure D.9 of CISPR 22 and G.9 of CISPR 32
- Can be used as CDN for IEC 61000-4-6 immunity tests

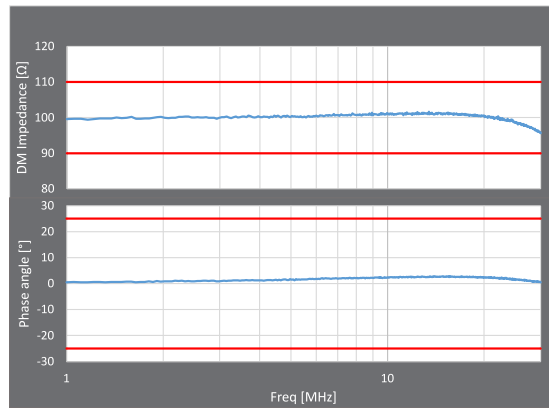
**ISN S1 Coaxial
ISN CISPR 22 and CISPR 32**

Impedance stabilization networks (ISN, or with CISPR 16-1-2 called AAN: asymmetric artificial network or AN: artificial networks for coaxial and other screened cables) are defined for measuring of conducted common mode disturbances at information technology equipment (ITE) as required in CISPR 22.

The ISN is placed between the equipment under test (EUT) and auxiliary equipment (AE) or load which are necessary for the operation of the EUT. The ISN establishes the common-mode termination impedance for the EUT's telecommunications port during measurement.

ISN S501A, ISN S502A, ISN S751 and ISN S752 are designed for measurements on 50 Ω and 75 Ω coaxial telecommunication lines. ISN S502A and ISN S752 are supplied with double screened coaxial cables and N connector. A design example is given in figure D.9 CISPR 22 (EN 55022) and figure G.9 CISPR 32 (EN 55032).

Verification results is provided with each unit. Traceable and accredited calibration according to ISO17025 are available upon request. The ISN can be ordered alone or with the CAS ISN which includes the necessary adapters for verification. Please refer to the CAS ISN datasheet.

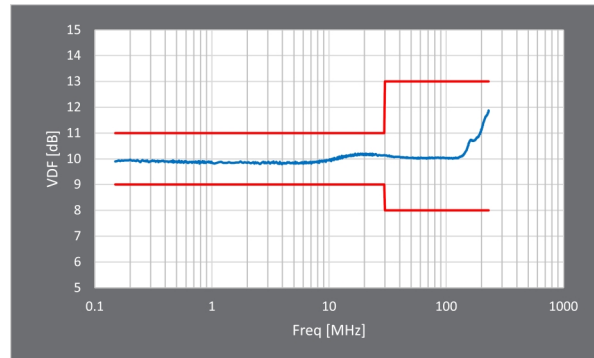
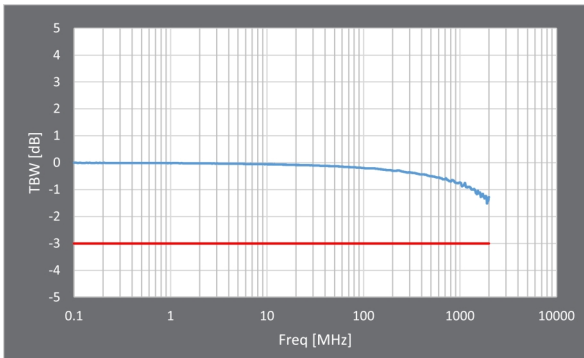


Typical performance of common mode impedance and phase

Electrical Specifications

	ISN S501A	ISN S502A	ISN S751	ISN S752
Frequency Range	150 kHz to 230 MHz			
Connector EUT Port	BNC 50 Ω	N 50 Ω	BNC 75 Ω	N 75 Ω
Connector AE Port				
Line Parameters	coaxial cables			
AC max. voltage (L-GND)	250 V			
DC max. voltage (L-GND)	400 V			
Current Max	1000 mA			
Test Voltage, 2 sec.	750 V DC			
Common Mode Impedance (EUT Port)	150 kHz to 30 MHz: 150 Ω ±20 Ω 30 MHz to 230 MHz: 150 Ω +60 Ω/ -40 Ω			
Phase angle (EUT Port)	150 kHz to 30 MHz: 0° ±20°			

Typical Performance for Transmission Bandwidth and Voltage Division Factor



RF to EUT/AE Specifications

	ISN S501A	ISN S502A	ISN S751	ISN S752
RF Port	BNC 50 Ω			
RF Voltage	< 20 V			
Voltage division factor (RF input to EUT port)	150 kHz to 30 MHz: 10 dB ±1 dB 30 MHz to 230 MHz: 10 dB +3 dB/ -2 dB			
Transmission bandwidth EUT / AE:	>2 GHz sin.			
CM decoupling (RF to AE)	150 kHz: >60 dB 1.5 MHz: >60 dB 30 MHz: >55 dB 230 MHz: >40 dB			

General Specifications

	ISN S501A	ISN S502A	ISN S751	ISN S752
Net Weight	approx. 1.5 kg			

Cable Specifications

	ISN 501A	ISN S502A	ISN S751	ISN S752
Screen	single screen	double screen	single screen	double screen
Impedance	50 Ω ±2 Ω		75 Ω ±1.5 Ω	
Min. screening effectiveness	< 38 dB	> 85 dB (up to 1 GHz)	<40 dB	> 78 dB (up to 3 GHz)
Max. operating frequency	1 GHz	6 GHz	1 GHz	3 GHz
Max. operating voltage	2.5 kVrms (at sea level)		3 kVrms (at sea level)	
Test voltage	5 kVrms (50 Hz/1 min)		6 kVrms (50 Hz/1 min)	

Available Models

Product	Description	Item #
ISN S501A	ISN for coax line with BNC 50 Ohms connector	248665
ISN S502A	ISN for coax line with 50 Ohms N-connector	248663
ISN S751	ISN for coax line with BNC 75 Ohms connector	248669
ISN S752	ISN for coax line with N 75 Ohms connector	248667

Accessories Information

Product	Description	Item #
ISN S501A	ISN for coax line with BNC 50 Ω connector	248665
ISN S502A	ISN for coax line with N 50 Ω connector, double screened	248663
ISN S751	ISN for coax line with BNC 50 Ω connector	248669
ISN S752	ISN for coax line with N 50 Ω connector, double screened	248667
ISN Sxxx-TC	Traceable calibration (ISO17025), order only with ISN S, related to CISPR 22 / 32 and IEC / EN 61000-4-6	97-248650
CAL U100B	Universal calibration unit (150 Ω / 50 Ω adapter)	247825
CAL U100X-TC	Traceable calibration (ISO17025), order only with CAL U100x device	97-247825
CAL U100XDAkKs	DAkKs accredited calibration (ISO17025), order only with CAL U100x device	98-247825
SAR S500	Calibration adapter part for BNC and N)	242440
A 50-N	Termination 50 Ω, N type, male, 1 Watt, 2.5 GHz	257521