

## Line Impedance Stabilization Networks / Artificial Mains CISPR 16-1-2 : 2014 , Single Phase / Two Wire, 10 A to 200 A



LISN (Artificial Mains Network) is a low-pass filter typically placed between an AC or DC power source and the EUT (Equipment Under Test) to create a known impedance as per complying standard for the measurement of conducted emission. It also isolates the unwanted RF signals from the power source with pre-filter included. It provides a Radio frequency (RF) noise measurement port.

LISN is used to predict conducted emission for diagnostic, pre-compliance and compliance testing.

Scientific designs and manufactures models in compliance with CISPR 16-1-2 : 2014, EN, ANSI C63.4, FCC, ETS, VCCI and VDE, MIL461E/F standards and automotive for measurements in commonly used Standards.

These LISNs are Single Phase, 2 Wire networks. Appropriate line can be selected by a rotary switch. The other line will be terminated internally with 50Ω.

Artificial Hand simulation 510Ω + 220pF impedance in accordance with CISPR 16-1-2 : 2014 is provided. Standard Input and Output terminals provided are CEE Sockets, however optional wing terminal and SUPERCON connectors can be ordered.

A transient limiter is highly recommended to use with LISN at the front end of EMI Rx or Spectrum Analyzer to protect measuring instrument from transients.

## Technical Specifications

Model	LIN10-2	LIN16-2	LIN32- 2	LIN63-2	LIN100-2	LIN200-2
Frequency Range	9 kHz – 30 MHz					
Maximum Load Current						
Continuous	10A	16 A	32 A	63 A	100 A	200 A
Peak Current (15 min)	15 A	18 A	45 A	80 A	120 A	225 A
Maximum Input Voltage (with Wing Terminals)*						
DC	600 V					
AC @ 50/60 Hz	300 V					
AMN Impedance	$(50 \mu\text{H} + 5 \Omega) \parallel 50 \Omega \pm 20 \%$					
Pre-Filter Choke	250 $\mu\text{H}$					–
Standard Reference	CISPR 16-1-2 : 2014, FCC (ANSI 63.4)					
RF Output	N Type (F) Connector 50 $\Omega$ to connect RF output to EMI receiver, Switch selectable for Line and Neutral					
Artificial Hand	510 $\Omega$ + 220 pF, 4 mm banana connector					
Mains Input & Output Terminals (EUT) and Maximum Voltage	EUT : Schuko DC : 300V , AC : 230V Mains Input : IEC320/C14 mains inlet		CEE (Complying to IEC 60309) DC 300V, AC : 230V EUT : Socket (F) Input mains : Socket (M)		Wing Terminal DC : 600V, AC : 300V	
	Optional : Supercon / Wing Terminal DC : 600V, AC : 300V					

Notes:

\* Maximum Input for EUT and Mains Inlet varies with selection of Connectors/ Terminals.

### Standard Accessories :

- N to N Cable 2 m
- N to BNC Adapter
- Manufacturer's Calibration Certificate

### Optional Accessories:

- Transient Limiter : -10dB
- Transient Limiter : -20dB
- Adapters from Schuko to US / UK / Australia / Switzerland & others

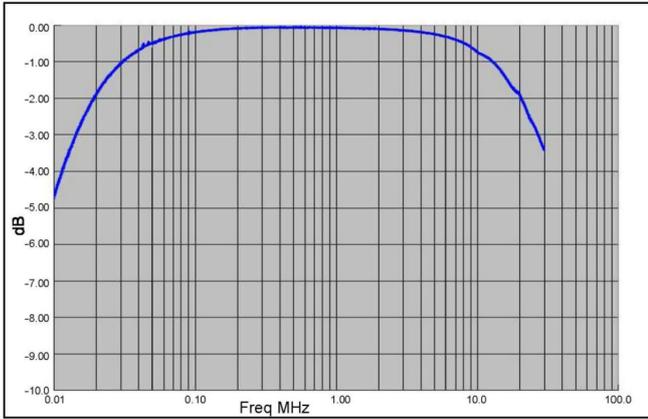
### Options :

- Remote Control (built-in) for R&S, Keysight, PMM, Gauss and other EMI Analyzers
- High Voltage 1 kV DC / 750 Vac (built-in) with Wing Terminals
- Switch selectable 250  $\mu\text{H}$  Pre-filter (built-in)
- Calibration Report traceable to ISO 17025

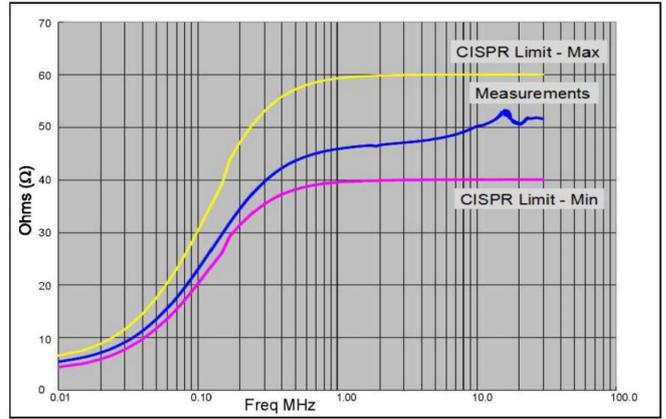
(Subject to change )

## Characteristics of LISN / AMN

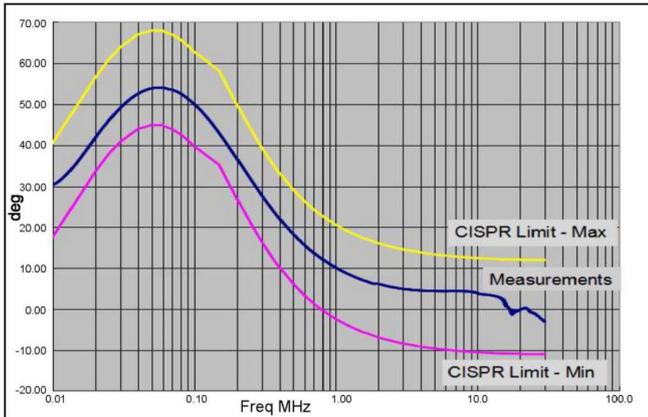
Voltage division factor (Attenuation)  
EUT to RF Connector



Impedance curve Terminal EUT RF  
connector terminated



Phase curve Terminal EUT RF  
connector terminated



Isolation curve Terminal EUT RF  
connector terminated

