

Line Impedance Stabilization Networks / Artificial Mains CISPR 16-1-2 : 2014, 3 Phase / 4 Wire, 16 A to 400 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 3 Phase, 4 Wire networks. Appropriate line can be selected by a rotary switch. All other lines 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 upto 100A, 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	SMLIN16-4	SMLIN32-4	SMLIN63-4	SMLIN100-4	SMLIN200-4	SMLIN400-4
Frequency Range	9 kHz – 30 MHz				*150kHz (**9kHz) – 30MHz	
Maximum Load Current						
Continuous Current	16 A	32 A	63 A	100 A	200 A	400 A
Peak Current (15 min.)	18 A	45 A	80 A	120 A	225 A	425 A
Maximum Input Voltage (Depends on Input and Output Connectors selected)						
DC	600 V					
AC @ 50/60 Hz	Line - Neutral : 300 V, Line - Line : 480 V					
AMN Impedance	(50 μ H + 5 Ω) 50 Ω \pm 20 %				50 μ H 50 Ω \pm 20 %	
Pre-Filter Choke	250 μ H				–	
Standard Reference	CISPR 16-1-2 : 2014, FCC (ANSI 63.4)					
RF Output	N Type (F) Connector 50 Ω to connect RF output to EMI receiver, Switch selectable for Three Lines and Neutral					
Artificial Hand	510 Ω + 220 pF, 4 mm banana connector					
Mains Input & Output Terminals (EUT) and Maximum Voltage	CEE (Complying to IEC 60309) DC 300V, AC : 230V EUT : Socket (F) Input mains : Socket (M)				Wing Terminal DC : 600V, AC : 300V	
	Optional : Wing Terminal / Supercon Max. Input voltage DC : 600V, AC : 300V					
	Optional : CEE connector - 3 Phase + Neutral , with additional Schuko - Single Phase (L+N) Max Input voltage DC : 300V , AC : 250V					

* Calibration from 150kHz – 30MHz

** Usable range

Standard Accessories:

- 50 Ω , 2W Termination
- 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

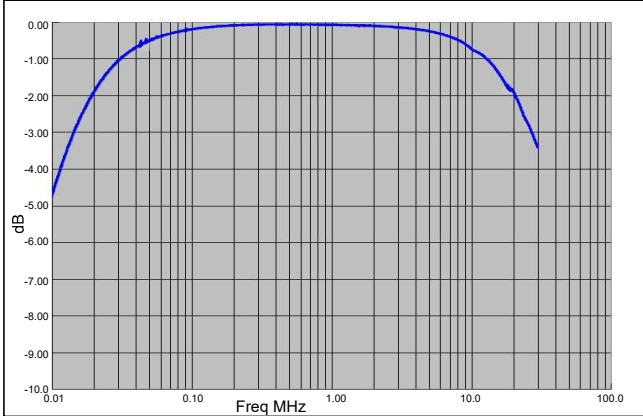
Options :

- 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 μ H Pre-filter (built-in)
- Calibration Report traceable to ISO 17025

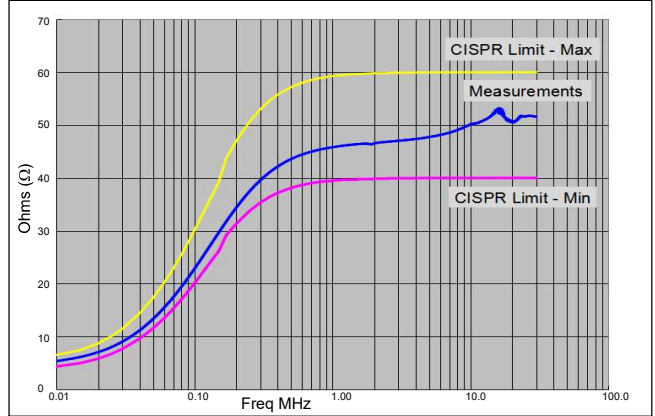
(Subject to Change)

Characteristic of LISN / AMN

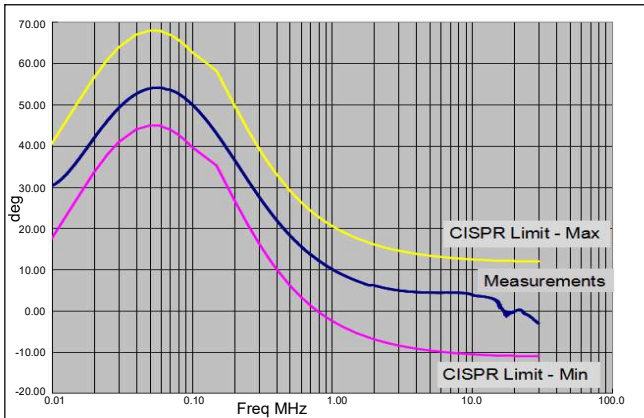
Voltage division factor (Attenuation)
EUT to RF Connector



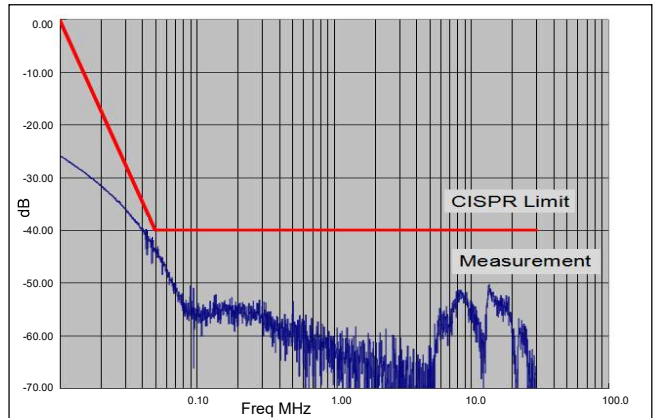
Impedance curve Terminal EUT RF
connector terminated



Phase curve Terminal EUT RF
connector terminated



Isolation curve Terminal EUT RF
connector terminated



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