

Line Impedance Stabilization Networks / Artificial Mains Network MIL 461 E/F, Single line 25 A to 1500 A



LISN (Artifical 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, EN, FCC (ANSI C63.4), ETS, VCCI and VDE, MIL461E/F standards and automotive for measurements in commonly used Standards.

These single line LISN are designed in accordance with MIL 461E/F, DO160 requirements. Characteristic impedance of these LISNs is $(50\mu H + 5\Omega) \parallel 50\Omega$

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	SMLIN25-1M	SMLIN100-1M	SMLIN200-1M	SMLIN400-1M	SMLIN1500-1M
Frequency Range	150 kHz (9 kHz) – 30 MHz				
Maximum Load Current					
Continuous Current	25A	100A	200 A	400 A	1500 A
Peak Current (15 min)	30 A	120 A	225 A	425 A	1600 A
Maximum Input Voltage					1
DC	600 V				
AC	300 V @ 50/60 Hz 130 V @ 440 Hz, 250 V @ 440 Hz (Optional)				
AMN Impedance	(50 μH + 5 Ω) 50 Ω ± 20%				
DC Resistance	< 10 mΩ < 2 mΩ				< 2 mΩ
Standard Reference	CISPR16-1-2/25, MIL461E/F, ISO 7637-2 Transients, BCI, DO-160				
RF Output Connector	N Type (F) Connector				
Mains Input & Output Terminals (EUT)	Wing Terminal, Optional : Supercon				Bus Bar with M12 Nut Bolts

Standard Accessories:

- 50Ω, 2W Termination
- N to N Cable 2 m
- N to BNC Adapter
- Manufacturer's Calibration Certificate

Voltage division factor (Attenuation) EUT to RF Connector



Optional Accessories:

- Transient Limiter : -10dB
- Transient Limiter : -20dB
- Calibration Report traceable to ISO 17025

Impedance curve Terminal EUT RF connector terminated



(Subject to Change)

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