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ARTIFICIAL NETWORK L1-150M1

UNDER TE

# L1-150M L1-150M Multi-standard Single-path LISN



Powering the EUT

P'M

• EUT termination to a standardized impedance respect to the reference ground

ARTIFICIAL NETWORK L1-150M

1e

- Coupling the measuring receiver to the disturbance generated by the EUT
- Decoupling the measuring receiver from unwanted RF signals from the power line

### **Main Features**

- L1-150M: 100 kHz to 200 MHz frequency range
- L1-150M1: 10 kHz to 400 MHz frequency range
- Multi standard design
- 150 A max output current
- Suitable also for DC lines
- Large baseplate for optimal grounding

P'M

- Robust, compact construction
- Screw terminals for safe wiring
- Meets the requirements of several standards including CISPR 16-1-2, CISPR 25, ISO 11452-2/4/5, ISO 7637-2, MIL-STD-461F, DO-160, ED-14G

The AMN - Artificial Mains Network, also known as LISN - Line Impedance Stabilization Network is the ancillary device intended for repeatable and accurate measurement of the disturbance voltage that an EUT (Equipment Under Test) may inject into the power line or mains.

This is obtained by providing well known impedance value and phase response across the frequency range of the test.

L1-150M and L1-150M1 are a single-path LISN (Line Impedance Stabilization Network) designed to be easily used for conducted disturbances measurements according to different standards for Automotive and ISM (Industrial, Scientific, Medical) applications. Selecting the standard is as fast as the turn of a rotary switch located on the rear panel. PMM Artificial Mains Networks provide robust and stable mechanical construction, high quality electric components, easy and perfect grounding, solid input and output power connections. They can be used in conjunction with any EMI receiver or spectrum analyzer and offer features required for safe, repeatable and accurate measurements.



# L1-150M, L1-150M1

Multi-standard Single-path LISN

SPECIFICATIONS	L1-150M	L1-150M1
Frequency range	100 kHz to 200 MHz	10 kHz to 400 MHz
Continuous rated output current	100 A	
Max. output current @ 45 °C	150 A	
Max. permissible	600 Vdc	
operating voltages	300 Vac	
EUT supply frequency range	DC to 440 Hz	
Equivalent circuit	(5 μH+0/1 Ω)//50 Ω	
RF output connector	N female, 50 Ω	
EUT connection	Screw terminal M10	
Line input connection	Screw terminal M10	
Ground connection	2x Screw terminal M10	
Operating temperature	-10 to +45 °C	
Storage temperature	-25 to +70 °C	
Dimensions (W x H x D)	230 x 105 x 410 mm	
Weight	5 kg	











### Ordering Information:

L1-150M - L1-150M1 Artificial Network Includes: Operating Manual, RF Cable, N-BNC adapter, Calibration Certificate

### **Optional accessories:**

SBRF4: RF switching box Automatic (in conjunction with PMM receivers) and manual switching of up to four single-path AMN. Internal 50 Ohm terminations and switchable 150 kHz high-pass filter. Low insertion loss. Max. operating frequency: 108 MHz.

- Electrical safety and presence of ground protection relays do require the installation of properly rated insulating transformer(s) between mains power line and AMN line inputs.
- High mains noise may require the installation of properly rated mains filters to reduce the level of unwanted signals.

• FIL-L2-16F: single phase RFI filter, 16 A

• FIL-L2-24M: single phase RFI filter, 24 A

• FIL-L3-32M: 3-phase+neutral RFI filter, 32 A

• FIL-L3-70M: 3-phase+neutral RFI filter, 70 A

# **Related Products**

#### Receivers

- 7010/00: EMI receiver 150 kHz to 1 GHz
- 7010/01: EMI receiver 9 kHz to 1 GHz
- 7010/02: EMI receiver 9 kHz to 30 MHz
- 7010/03: EMI receiver 9 kHz to 3 GHz
- 9010: EMI receiver 10 Hz to 30 MHz
- 9010F: EMI receiver 10 Hz to 30 MHz
- 9010/03P: EMI receiver 10 Hz to 300 MHz
- 9010/30P: EMI receiver 10 Hz to 3 GHz
- 9010/60P: EMI receiver 10 Hz to 6 GHz

### LISN

- L2-16B: single phase AMN, 16 A
- L3-32: 4 lines, 3-phase AMN, 32 A
- L3-64: 4 lines, 3-phase AMN, 63 A
- L3-64/690: 4 lines, 3-phase AMN, 63 A
- L3-100: 4 lines, 3-phase AMN, 100 A
- L3-500: 4 lines, 3-phase AMN, 500 A
- L1-500: single phase AMN, 500 A
- L2-D: Delta LISN for telecom, 2 A, 150  $\Omega$





### Headquarter:

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**RFI Filters**