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

<table>
<thead>
<tr>
<th>Model</th>
<th>LIN10-2</th>
<th>LIN16-2</th>
<th>LIN32-2</th>
<th>LIN63-2</th>
<th>LIN100-2</th>
<th>LIN200-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>9 kHz – 30 MHz</td>
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</table>

### Maximum Load Current

<table>
<thead>
<tr>
<th></th>
<th>LIN10-2</th>
<th>LIN16-2</th>
<th>LIN32-2</th>
<th>LIN63-2</th>
<th>LIN100-2</th>
<th>LIN200-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous</td>
<td>10 A</td>
<td>16 A</td>
<td>32 A</td>
<td>63 A</td>
<td>100 A</td>
<td>200 A</td>
</tr>
<tr>
<td>Peak Current (15 min)</td>
<td>15 A</td>
<td>18 A</td>
<td>45 A</td>
<td>80 A</td>
<td>120 A</td>
<td>225 A</td>
</tr>
</tbody>
</table>

### Maximum Input Voltage

<p>| | | | | | | |</p>
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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>DC</td>
<td>600 V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC @ 50/60 Hz</td>
<td>300 V</td>
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</tbody>
</table>

### AMN Impedance

(50 µH + 5 Ω) || 50 Ω ± 20%

### Pre-Filter Choke

250 µH

### 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 Line and Neutral

### Artificial Hand

510 Ω + 220 pF, 4 mm banana connector

### Mains Input & Output Terminals (EUT)

<table>
<thead>
<tr>
<th></th>
<th>Schuko</th>
<th>CEE (Complying to IEC 60309)</th>
<th>Wing Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional :</td>
<td>Supercon / Wing Terminal</td>
<td></td>
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</tr>
</tbody>
</table>

### Standard Accessories:

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

### 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 µH Pre-filter (built-in)
- Calibration Report traceable to ISO 17025

### Optional Accessories:

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

(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