Features

- Frequency range of 10 kHz to 10 MHz
- Fully compliant with MIL-STD 461
- 100 Amp (AC) (forced air cooling)
- "Air-core" inductors to prevent saturation
- Individual Calibration Included
- Three-Year Warranty

Description

The LI-4100 Line Impedance Stabilization Network (LISN) provides the necessary measurement platform for performing power line conducted emissions compliance testing as required by most worldwide standards for commercial products. The LI-4100 is compliant with MIL-STD 461F.

The LISN provides defined stable impedance and isolates the EUT from power source influences, thereby providing accurate and repeatable results.

The LI-4100 includes one pair of, separately housed, single-conductor networks, to be installed in series with each current-carrying conductor in a single-phase, dual-phase or DC power system. A second LI-4100 pair can be used to accommodate 3-phase power systems (Wye or Delta configurations).

The LI-4100 is equipped with Superior Electric SUPERCON® shrouded sockets at the mains (power input) and EUT (power output) ports. The matching color-coded plugs for connection to the mains and EUT wiring are included.

This LISN uses air-core inductors to prevent saturation and permeability variation. The mounting plate of the LI-4100 is left unpainted in order to facilitate connection to earth ground in its installation, which is essential due to high leakage current.

Transient Protection

Use of a Transient Limiter for impedance matching, reduction of out-of-band emissions and transient protection for your measurement instrument is highly recommended and available from Com-Power.

Calibration

All LI-4100 LISNs are individually calibrated in compliance with the relevant requirements of MIL-STD 461F. Recognized ISO 17025 accredited calibration is also available upon request.

Typical Connection Diagrams

- **Single Phase connection with one LISN pair**
- **Three Phase connection with two LISN pairs**

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Line Impedance Stabilization Network
LI-4100

Application

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Line Impedance Stabilization Network (LISN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specification</td>
<td>MIL-STD 461F</td>
</tr>
<tr>
<td>Application</td>
<td>Power line conducted emissions tests</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>10 kHz to 10 MHz</td>
</tr>
<tr>
<td>RF Connector</td>
<td>50Ω N-type (female)</td>
</tr>
<tr>
<td>Current Rating</td>
<td>100 Amperes(<em>{AC}), 70 Amperes(</em>{DC})</td>
</tr>
<tr>
<td>Voltage Rating</td>
<td>525 VAC (Line to Ground), 740 VDC</td>
</tr>
<tr>
<td>Inductors</td>
<td>50 µH (air-core)</td>
</tr>
<tr>
<td>Mains &amp; EUT Connections</td>
<td>Superior Electric SUPERCON® shrouded sockets</td>
</tr>
<tr>
<td>Dimensions (each network)</td>
<td>10 x 10 x 21 inches /25.4 x 25.4 x 53.3 cm</td>
</tr>
<tr>
<td>Weight (each network)</td>
<td>17 lbs. / 7.7 kg</td>
</tr>
</tbody>
</table>

All specifications are subject to change without notice.
All values are typical, unless specified.

Impedance

![Impedance Graph]

Insertion Loss

![Insertion Loss Graph]