

# Line Impedance Stabilization Network

## LI-1100

### Features

- Frequency range of 150 kHz to 30 MHz
- 100 Amp<sub>(AC)</sub> (forced air cooling)
- Fully compliant with CISPR 16-1-2 / ANSI C63.4
- “Air-core” inductors to prevent saturation
- Individual Calibration Included
- Three-Year Warranty

### Description

The LI-1100 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-1100 is compliant with both CISPR 16-1-2 and ANSI C63.4.

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

The LI-1100 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-1100 pair can be used to accommodate 3-phase power systems (Wye or Delta configurations).

The LI-1100 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-1100 is left unpainted in order to facilitate connection to earth ground in its installation, which is essential due to high leakage current.

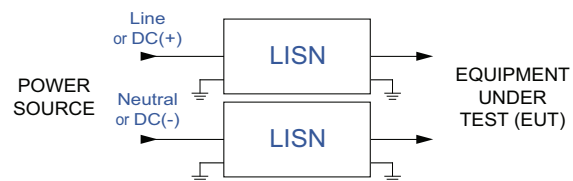


Use of a Transient Limiter for impedance matching, reduction of out-of-band emissions and transient protection for your measurement instrument is highly recommended and available from Com-Power.

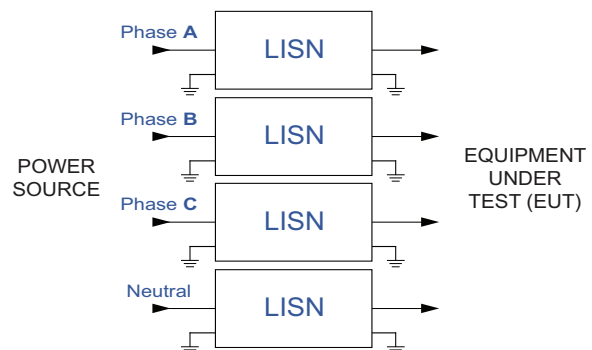
All Com-Power LISNs are individually calibrated in compliance with the relevant requirements of CISPR 16-1-2 and ANSI C63.4. Impedance, Phase, Isolation, and Insertion Loss data is supplied with each unit, along with the calibration certificate.

### Typical Connection Diagrams

Single Phase connection with one set of LISN



Three Phase connection with two sets of LISNs



### Application

<b>Product Name</b>	Line Impedance Stabilization Network (LISN)
<b>Specification</b>	CISPR 16-1-2 / ANSI C63.4
<b>Application</b>	Power line conducted emissions tests
<b>Frequency Range</b>	150 kHz to 30 MHz
<b>RF Connector</b>	50Ω N-type (female)
<b>Current Rating</b>	100 Amperes <sub>(AC)</sub> , 70 Amperes <sub>(DC)</sub>
<b>Voltage Rating</b>	440 VAC (Line to Ground), 620 VDC
<b>Inductors</b>	50 μH (air-core)
<b>Mains &amp; EUT Connections</b>	Superior Electric <b>SUPERCON</b> ® shrouded sockets
<b>Dimensions (each network)</b>	10 x 10 x 21 inches / 25.4 x 25.4 x 53.3 cm
<b>Weight (each network)</b>	17 lbs. / 7.7 kg
<b>Insertion Loss</b>	< 0.5 dB (150 kHz to 30 MHz)
<b>Isolation</b>	> 40 dB (150 kHz to 30 MHz)
<b>Fan Power Adapter</b>	Input: 120 VAC 60Hz, Output: 12 VDC 1 Amperes

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

