COM-POWER CORPORATION

Line Impedance Stabilization Network
LI-4100

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

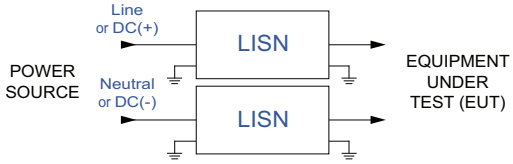
Use of a Transient Limiter for impedance matching, reduction of out-of-band emissions and transient protection for your measurement instrument is highly recommended and available from Com-Power.

Calibration

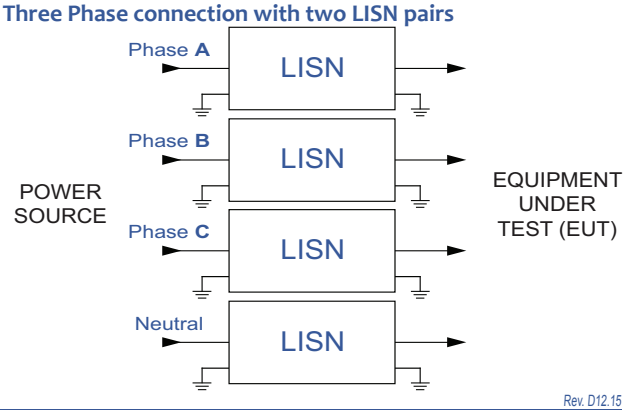
All LI-4100 LISNs are individually calibrated in compliance with the relevant requirements of MIL-STD 461F. Recognized ISO 17025 accredited calibration is also available upon request.

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

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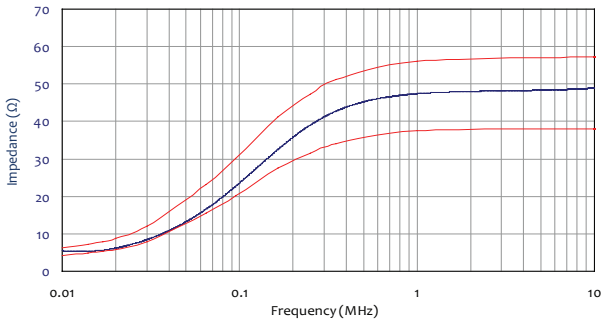
Application

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

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

Impedance



Insertion Loss