

Features

Frequency range of 10 kHz to 400 MHz

Fully compliant with DO-160/ MIL-STD 461F/
CISPR 25/ CISPR 16-1-2

100 Amp_(AC) (forced air cooling)

“Air-core” inductors to prevent saturation

Individual Calibration Included



Description

The LI-3100 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-3100 is a 5 μ H LISN compliant with RTCA DO-160, MIL-STD 461F, CISPR 25 and CISPR 16-1-2.

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

The LI-3100 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-3100 pair can be used to accommodate 3-phase power systems (Wye or Delta configurations).

The LI-3100 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-3100 is left unpainted in order to facilitate connection to earth ground in its installation, which is essential due to high leakage current.

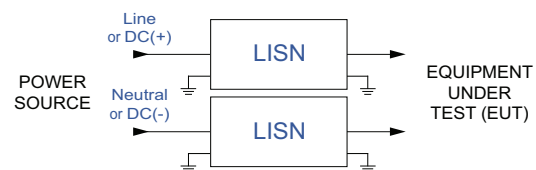
Calibration

All LI-3100 LISNs are individually calibrated in compliance with the relevant requirements of RTCA DO-160, MIL-STD 461F, CISPR 25 and CISPR 16-1-2.

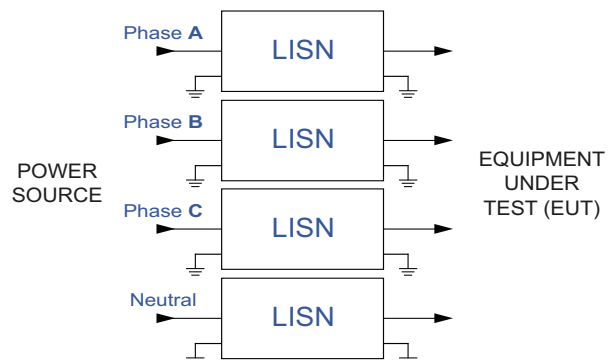
Impedance, Phase and Insertion Loss data is supplied with each unit, along with the calibration certificate.

Typical Connection Diagrams

Single Phase connection with one set of LISN



Three Phase connection with two sets of LISNs

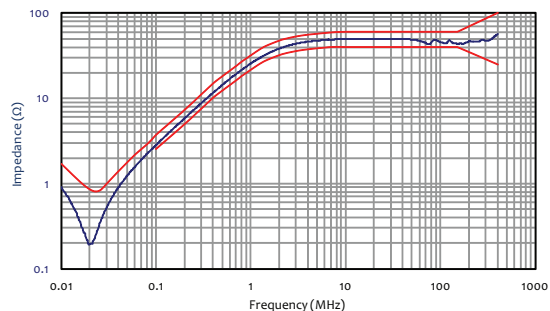


Application

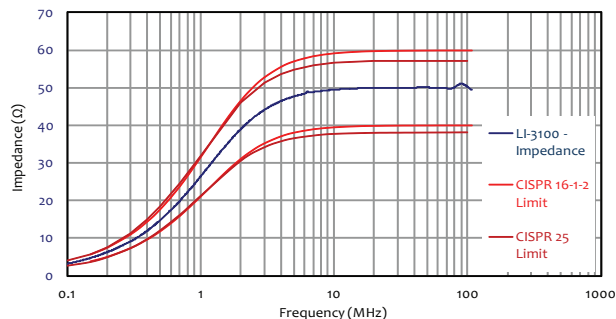
Product Name	Line Impedance Stabilization Network (LISN)
Specification	RTCA DO-160 / MIL-STD 461F / CISPR 25 / CISPR 16-1-2
Application	Power line conducted emissions tests
Frequency Range	10 kHz to 400 MHz
RF Connector	50Ω N-type (female)
Current Rating	100 Amperes _(AC) , 70 Amperes _(DC)
Voltage Rating	480 VAC (Line to Ground), 676 VDC
Inductors	5 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)	13 lbs. / 5.9 kg
Insertion Loss	< 0.65 dB (100 kHz to 108 MHz)

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

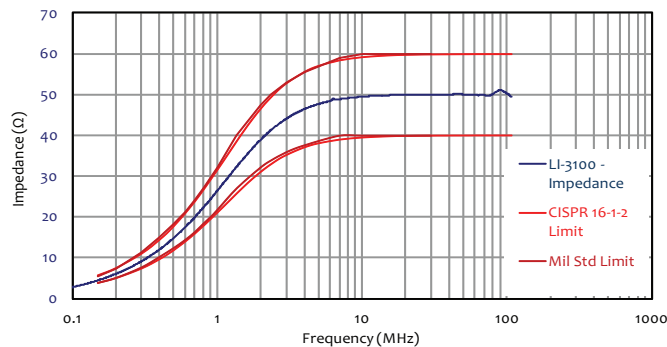
Impedance - DO-160 Limits



Impedance - CISPR 16 & 25 Limits



Impedance - Mil Std 461F & CISPR 16 Limits



Phase - CISPR 16 Limits

