

# Line Impedance Stabilization Network

#### **Features**

Frequency range of 10 kHz to 400 MHz

Fully compliant with DO-160/ MIL-STD 461F

"Air-core" inductors to prevent saturation

Individual Calibration Included

Three-Year Warranty



#### **Description**

The LI-350 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-350 is compliant with both RTCA DO-160 and 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-350 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-350 pair can be used to accommodate 3-phase power systems (Wye or Delta configurations).

The LI-350 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.

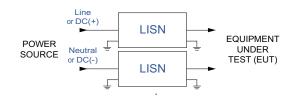
This LISN uses air-core inductors to prevent saturation and permeability variation. The mounting plate of the LI-350 is left unpainted in order to facilitate connection to earth ground in its installation, which is essential due to high leakage current.

#### **Calibration**

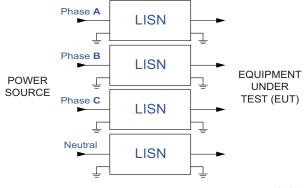
All LI-350 LISNs are individually calibrated in compliance with the relevant requirements of RTCA DO-160 and MIL-STD 461F. Impedance and Insertion Loss data is supplied with each unit, along with the calibration certificate.

#### **Typical Connection Diagrams**

Single Phase connection with one set of LISN



Three Phase connection with two sets of LISNs



Rev. D01.16

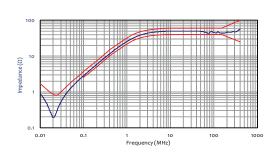


## **Application**

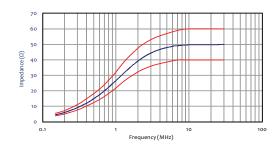
Product Name	Line Impedance Stabilization Network (LISN)
Specification	RTCA DO-160 / MIL-STD 461F
Application	Power line conducted emissions tests
Frequency Range	10 kHz to 400 MHz
RF Connector	50Ω N-type (female)
Current Rating	50 Amperes <sub>(AC)</sub> , 35 Amperes <sub>(DC)</sub>
Voltage Rating	480 VAC (Line to Ground), 676 VDC
Inductors	5 μH (air-core)
Mains & EUT Connections	Superior Electric <b>SUPERCON</b> ® shrouded sockets
Dimensions (each network)	15.4 x 7 x 6.6 inches / 39.1 x 17.7 x 16.7 cm
Weight (each network)	6 lbs. / 2.7 kg
Insertion Loss	< 0.2 dB (150 kHz to 30 MHz)

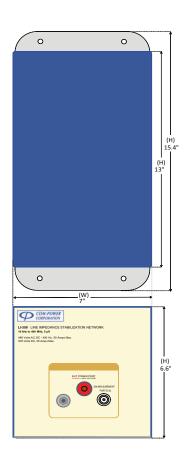
All specifications are subject to change without notice. All values are typical, unless specified.

### Impedance - DO-160 Limits



### Impedance - Mil Std 461F Limits





LI-350