# Line Impedance Stabilization Network

#### **Features**

Frequency range of 10 kHz to 10 MHz

Fully compliant with MIL-STD 461

100 Amp<sub>(AC)</sub> (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**

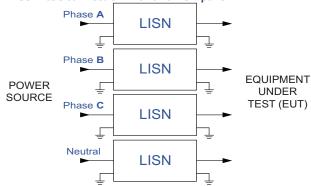
All LI-4100 LISNs are individually calibrated in compliance with the relevant requirements of MIL-STD 461F. Recognized ISO 17025 accredited calibration is also available upon request.

# **Typical Connection Diagrams**

Single Phase connection with one LISN pair



Three Phase connection with two LISN pairs



# **Line Impedance Stabilization Network**

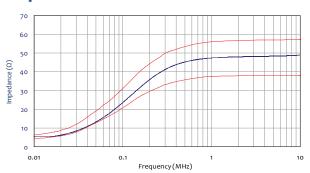
#### LI-4100

# **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 <sub>(AC)</sub> , 70 Amperes <sub>(DC)</sub>
Voltage Rating	525 VAC (Line to Ground), 740 VDC
Inductors	5ο μΗ (air-core)
Mains & EUT Connections	Superior Electric <b>SUPERCON</b> ® 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**

