

#### **Line Impedance Stabilization Network** LI-550A

#### **Features**

Frequency range of 100 kHz to 108 MHz Fully compliant with CISPR 25 / CISPR 16-1-2 "Air-core" inductors to prevent saturation Individual Calibration Included Three-Year Warranty

## **Description**

The LI-550A 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-550A is compliant with both 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-550A includes one pair of, separately housed, single-conductor networks, to be installed in series with each current-carrying conductor in a singlephase, dual-phase or DC power system. A second LI-550A pair can be used to accommodate 3-phase power systems (Wye or Delta configurations).

The LI-550A 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. mounting plate of the LI-550A is left unpainted in order to facilitate connection to earth ground in its installation, which is essential due to high leakage current.



## **Transient Protection**

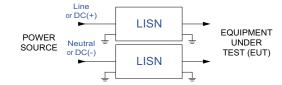
Use of a Transient Limiter for impedance matching, reduction of out-of-band emissions and transient protection for your measurement instrument is highly recommended and available from Com-Power.

## **Calibration**

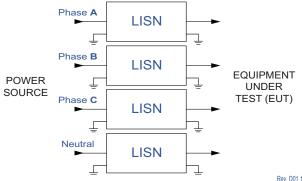
All LI-550A LISNs are individually calibrated in compliance with the relevant requirements of CISPR 25 and CISPR 16-1-2. Impedance, Phase, Isolation, and Insertion Loss data is supplied with each unit, along with the calibration certificate.

## **Typical Connection Diagrams**

Single Phase connection with one set of LISN



Three Phase connection with two sets of LISNs





# Line Impedance Stabilization Network LI-550A

# **Application**

Product Name	Line Impedance Stabilization Network (LISN)
Specification	CISPR 25 / CISPR 16-1-2
Application	Power line conducted emissions tests
Frequency Range	100 kHz to 108 MHz
RF Connector	50Ω N-type (female)
Current Rating	50 Amperes <sub>(AC)</sub> , 35 Amperes <sub>(DC)</sub>
Voltage Rating	270 VAC (Line to Ground), 380 VDC
Inductors	5 μH (air-core)
Mains & EUT Connections	Superior Electric <b>SUPERCON</b> ® shrouded sockets
Dimensions (each network)	13 x 7 x 7 inches / 33 x 17.7 x 17.7 cm
Weight (each network)	14 lbs. / 6.3 kg
Insertion Loss	< 1.5 dB (150 kHz to 30 MHz)
Isolation	> 20 - 40 dB (100 kHz to 3 MHz) > 40 dB ( 3 MHz to 30 MHz)

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

