

A Review on the Characteristics of Line Impedance Stabilization Network

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Abstract: A Line Impedance Stabilization Network (LISN) is an essential component in electromagnetic compatibility (EMC) testing and measurement. Its primary purpose is to provide a standardized interface between electronic devices, such as radios, computers, and other electrical equipment, and the power supply grid during conducted emissions testing. A LISN is designed to facilitate accurate and repeatable measurements of electromagnetic interference (EMI) generated by electronic devices when they are connected to the power supply grid. It serves as an essential tool for assessing the compliance of electronic equipment with EMC standards and regulations. A low-pass filter within the LISN helps remove high-frequency noise and disturbances from the power supply, allowing only the emissions of interest to pass through for measurement. A Line Impedance Stabilization Network (LISN) is a critical tool for EMC testing and measurement, providing a standardized and controlled interface between electronic devices and the power supply grid. It enables the assessment of conducted emissions from electronic equipment, helping manufacturers ensure their products comply with EMC regulations and minimizing the risk of interference with other devices and systems.

Keywords: A Line Impedance Stabilization Network (LISN), electromagnetic interference (EMI), electromagnetic compatibility (EMC), Equipment under test (EUT), Device under test (DUT)

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