

A NOVEL MEASUREMENT TOOL FOR ELECTRICAL NETWORK POWER QUALITY AND STABILITY ANALYSIS OF MORE ELECTRIC AIRCRAFT (AST 2009)

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Abstract

Power quality and stability studies for power system of aircraft in early design phase require adequate modelling, simulation and measurement tools. In this paper, a novel measurement tool as a meaningful supplement of Dymola (Dynamic Modelling Laboratory) is presented.

This measurement tool provides a convenient platform to undertake signal processing and analysis of systems after modelling and simulation in Dymola. The motivation, concept as well as implementation and distinct features of the tool are discussed and illustrated by power quality and stability application for electrical network of the more electric aircraft.