DSP in Microgrid

In this paper, multi-stage energy optimization with demand response programs (DRPs) in a smart microgrid (SMG) is investigated. The proposed approach by using tri-stage multi-objective ...

This paper provides a comprehensive review of protection strategies for DC microgrids (DC MGs), highlighting their evolution through a year-wise analysis of key research publications.

The DG paradigm, which combines renewable and non-renewable energy resources to create a Micro grid that can be run more safely and effectively using fast islanding detection ...

At this point, it was explained how the SVM was implemented in the dSPACE-based AC microgrid, using space vector PWM from the internal slave DSP of the dSPACE ds1103.

Develop, test, and deploy parallel converters and microgrids using our microgrid DSP interface-with up to three DSP controllers-and our HIL emulators in cluster or individual configuration.

In this study, the authors propose a method to implement a low-cost hardware-in-the-loop (HIL) system for power converters and microgrids design, test and analysis. This approach uses a ...

These systems integrate distributed energy sources (including photovoltaic, wind power, mini hydro, gas turbine, etc.) and energy storage devices (such as batteries, ultra-capacitors, ...

Figure 13 present real-world photovoltaic (PV) system designed for microgrids. This system utilizes an intelligent artificial neural network to extract the maximum power from the PV ...