

Monitoring and Analysis of Photovoltaic Grid System

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Abstract: Due to huge population and the society of modern industries, the energy demand increases exponentially and the need arises to motivate use of alternate energy sources to improve the quality and efficiency of power. As for the literature survey of renewable energy sources is concerned the use of photovoltaic energy has emerged as a primary, resource because the solar energy is clean, environment friendly. As far as the power grids are concerned, the demand is a smart concept to be introduced and thus different IOT concepts need to be imperatively implemented to monitor and control the statics of grid. Solar or photovoltaic (PV) technology is perhaps the best development sustainable power assets to create electrical power in the world. The best benefits are lasting, accessible all over on the planet, perfect, free, without contamination, and have little upkeep necessities. The paper presents the complete model of simulation of 100KW solar power plant with protection circuit and filter circuit for short circuit and reduction of harmonics.

Keywords: IOT, Smart, Grid, PV, Harmonics

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