

SOLAR POWERED CLOSED LOOP SVPWM INVERTER CONNECTED TO GRID

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Due to the drastic increase of global energy demand and rapid consumption of conventional fossil fuel resource, solar energy has become one of the popular renewable energies. A solar powered closed loop SVPWM inverter connected to grid with MPPT control is proposed in this paper. The inverter which is fed by dc to dc converter model is programmed in Maximum Power Point Tracking (MPPT) mode using optimal duty ratio to achieve maximum output. Applying the concept of MPPT and properly controlling the duty cycle of the switches, the solar power powered DC-DC converter is successfully worked to extract maximum power from the solar panel.

