



AK Tech Training and Placements

Transform Dreams into Reality

Cascaded Multilevel PV Inverter With Improved Harmonic Performance During Power Imbalance Between Power Cells

a multilevel topology for photovoltaic (PV) applications is proposed, where an H6 bridge power cell is used instead of an H-bridge one. In case of solar irradiance mismatch among the power cells, the proposed converter injects power with lower voltage from the shaded cells without altering the PV voltage; hence maintaining the MPPT operation. This modification allows us to retain an equal duty cycle in all the power cells whatever the meteorological conditions are present; consequently, maintaining good output voltage and current waveform qualities.

Domain: Power Electronics / Multilevel Converters

Technology: Electrical