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# Power Equalizer Application for Partially Shaded Photovoltaic Module

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**Abstract:** *A PV module is partially shaded when the light cast upon some of its cells is obstructed by some object, creating a shadow. To protect the shaded cells from being destroyed and to minimize losses in power production, PV modules are equipped with bypass diodes. They prevent the shaded cells from working under reverse voltage by short-circuiting them, thus allowing the other cells to work at their normal current. This work represents to implement topology for working under reverse voltage, thus allowing the other cells to work at their normal current and mode analysis.*

**Keywords:** PV modules

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