Design And Development Of Grid Connected Home Automation System For Prosumers

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Abstract:
Home automation system extend convenience and sophisticated to operate electronic product with in the household. Home automation can be a solution to automating functions like monitoring, controlling etcetera in the home. This paper describes the drives, restraints, opportunities and challenges pertaining to the home automation system market. The grid solar power system is connected to the utility grid where solar power is generated. The power generated if in excess send back to utility grid. Hence the consumer gets compensation as the extra power sent back to the utility grid. Whenever the sunlight, electricity is generated by solar cell, the inverter connected to grid convert the dc power into ac power. The electricity produced is routed to the grid from, where it used to run the various appliances such as air conditioners, washing machine, refrigerator, geyser, induction cooker, pump etc. The excess power at every instant is transmitted to the ground without grid connection and if solar power system is synchronized with the utility grid then return to the grid. It will also determine the feasibility of reducing green gas emission by the use of grid tied PV power system.

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