

SOLAR SYSTEMS: WHAT SIZE IS RIGHT FOR YOU?

All solar energy systems begin with a series of small photovoltaic (PV) cells that produce electricity directly from sunlight. These PV cells are combined to form a module or panel. Several panels are connected together to form an array or a solar system.

ROOFTOP / GROUND MOUNTED SYSTEMS

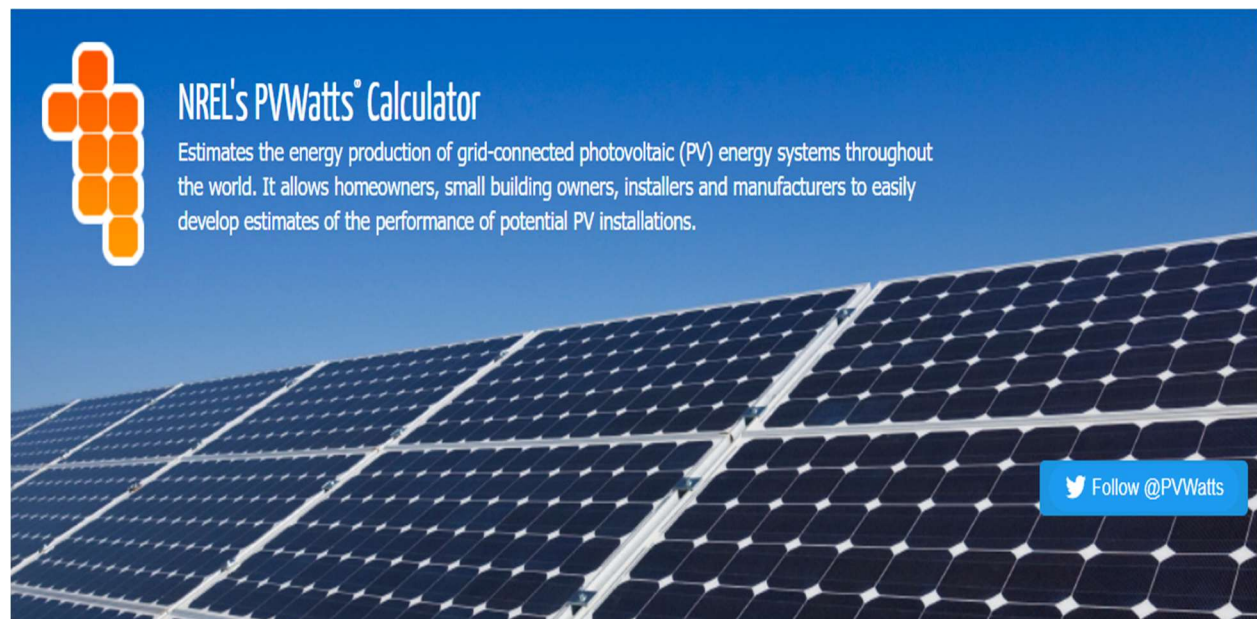
As the name suggests, rooftop systems are mounted on a roof. This may be a home, a commercial/industrial building, a public building, or even a parking garage. Ground mounted systems are typically mounted on a fixed rack near the structure location.

The actual amount of energy produced depends on the location. Typical home systems are sized to produce between 5 and 15 kilowatts (kW). On average, 75 square feet of solar panels are needed to produce each kilowatt of direct current (DC) power during peak solar periods.

The energy produced by the solar system helps offset energy use of the building for which it is installed. During some times of the day or months of the year, it may produce more energy than is used within the home or commercial building.

The number of solar panels installed on the building can be expanded over time, depending on the size and configuration of the building, and the owner's desire to install additional capacity.

NREL (National Renewable Energy Laboratory) has a website that you can use to help determine what size solar energy system would be best for your energy needs. pvwatts.nrel.gov

A banner for NREL's PVWatts Calculator. The background is a blue sky with a close-up view of solar panels. On the left, there is a logo consisting of a grid of orange squares. To the right of the logo, the text reads "NREL's PVWatts Calculator" in white. Below this, in smaller white text, it says "Estimates the energy production of grid-connected photovoltaic (PV) energy systems throughout the world. It allows homeowners, small building owners, installers and manufacturers to easily develop estimates of the performance of potential PV installations." In the bottom right corner, there is a blue button with a white Twitter icon and the text "Follow @PVWatts".

NREL's PVWatts Calculator

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