

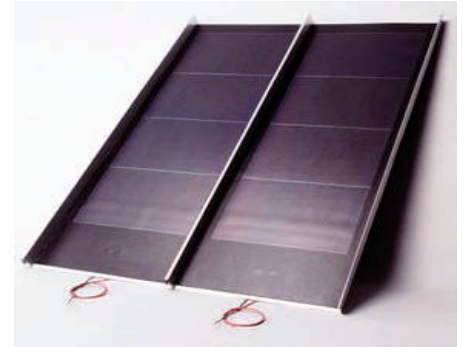


Photovoltaic Power Systems

Photovoltaic (PV) power systems convert sunlight directly into electricity. There are two primary types of PV cells: crystalline silicon and amorphous silicon. Crystalline cells require a glass enclosure to protect them, while amorphous cells can be exposed directly to the weather, are flexible, durable and maintain their performance level better in high temperatures, although they also take more space and are typically more expensive. The amorphous PV panels are also available in what is known as Building Integrated Photovoltaics or BIPV.



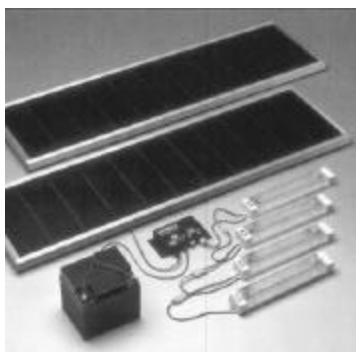
BIPV systems include shingle roofing and metal roofing with PV cells incorporated into them. These roofing systems generate electricity and provide long-lasting roofing at the same time. The amorphous silicon PV cells that are part of the roofing are guaranteed to perform to at least 80 percent of the rated power output after 20 years of use.



PV systems electrical directly, or electricity in later, at night emergencies backup systems have both commercial reliable, power desired.



can power equipment be used to store batteries for use and/or during requiring power. PV applications in residential and buildings where earth-friendly generation is



PV power can be small applications. be accomplished systems sized to number of nighttime lighting required. systems can also be primary power to manufacturing



used in large and Remote lighting can with simple, packaged accomplish the hours and quantity of Large commercial designed to provide retail and facilities.