

The principle of electric shock from power supply in solar power generation system of solar container communication station





Overview

How does solar power work?

The solar electricity seeks to convert light from the sun directly into electricity through a process known as photovoltaic. Photovoltaic system may be categorized as stand-alone photovoltaic system, photovoltaic system for vehicle applications (solar vehicles), grid-connected photovoltaic system and building systems.

What is solar power?

Solar power is the conversion of sunlight into electricity, either directly using photovoltaic (PV), or indirectly using concentrated solar power (CSP). The research has been underway since very beginning for the development of an affordable, in-exhaustive and clean solar energy technology for longer term benefits.

How solar energy is generated?

The PV technology convert visible spectrum to electricity and thermal collectors use both infrared and visible spectrum for energy generation. So the energy generation from solar radiation can be in the form of electrical energy or thermal Energy. The various conversion paths of solar energy is described in the Fig.2.

How a photovoltaic system is integrated with a utility grid?

A basic photovoltaic system integrated with utility grid is shown in Fig. 2. The PV array converts the solar energy to dc power, which is directly dependent on insolation. Blocking diode facilitates the array generated power to flow only towards the power conditioner.



The principle of electric shock from power supply in solar power generation

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