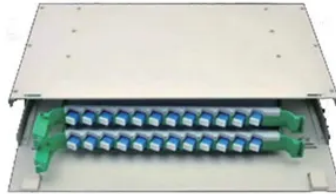


Photovoltaic inverter DC water pump



Overview

The simplest type of PV system one could ever design is by connecting single or multiple PV modules directly to the DC load as shown in figure 1 below. The overall capacity of the modules is such that it can supply power only during the sunshine hours. No special arrangement is made to have. Now before we begin with the design of the system for water pumping it is important to understand some terms which are closely related to design such a standalone system. To understand this simply let us take a design example where we need 50 m³ water per day from a depth of 20 m. It has elevation, standing water level, and drawdown of 10 m, 10 m, and 4 m respectively. Water density is 1000 kg/m³ and acceleration due. All the above parameters are very useful for the design of the system for water pumping using solar PV modules. Now let us see how these parameters and different steps can be useful.

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