



Solar Water Pumping System

IMPORTER / SYSTEM INTEGRATOR :

D-Light Power Controls

THE NAME FOR COMPLETE
ENGINEERING SOLUTIONS SINCE 1994.

Range : 0.37 - 4.5kW (with various head) / Customized

Solar Pump System

Introduction :

D-Light Power Controls, India introduces **solar pump system** to gain the maximum level of service and satisfaction from your pumping system. The solar pump system consists of four major parts: Solar PV array, Solar Pump Control Unit, Solar Submersible Pump and electronic water level sensor. It can be widely used as highly effective water supply system in the electric power and water resources starved area.

System Characteristics :

The solar pump consists of a non-position sensitive permanent magnet brushless DC motor coupled to a screw (helical rotor) pump body or centrifugal pump body, matched with an above ground electronic controller. This motor is designed to be simple to operate and of sturdy construction, yet is compact and light weight when compared to its performance capabilities. Motor rotor and stator are double-plastic encapsulated to improve insulation performance. The motor is oil filled and can be submerged up to 40m below water level. The control unit incorporating features such as MPPT, over-current protection, under voltage protection, low water level sensor input and tank full input.

Advanced Technology :

(I). Application innovation Compared with the traditional alternating current machine, the efficiency is improved 25% by the permanent magnetism, direct current, brushless, non-sensor motor. (II). Technics innovation Adopt double plastic package for rotor and stator, motor insulation $\geq 300M\Omega$, the motor security was much improved. (III). Structure innovation Oil filling, convenient installation and environmental protection.

Advantages Of Solar Pump System :

(A). It is easier and more widely used than any other dynamoelectric driven pumps. (B). It is more economical and more environmentally friendly.

HIGHLIGHTS :

(A). Energy-Saving & environment-protected green products
(B). High technique products adopting MPPT and DSP chip technique.
(C). 100% copper wire, cold-rolled silicon steel sheet
(E). Advanced three phase brushless DC motor
(F). Stainless steel 316 screws
(G). 2 years warranty.

PRINCIPLE OF OPERATION :

Solar panel collects sunlight → DC electricity energy → solar controller (rectification, stabilization, amplification, filtering) → available DC electricity → (charge the batteries) → pumping water.

Applications :

Solar water pumping are mainly used in dry region for irrigation of agriculture, It can be used for drinking water and living water. The living condition could be much improved. It also can be used for fish pound etc.

