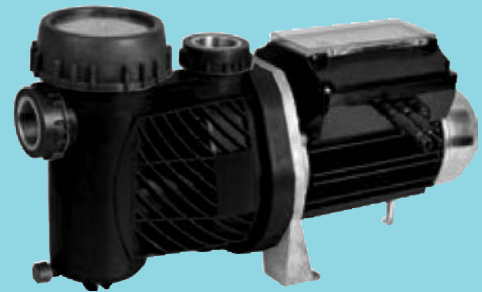# SUNPOOL

Solar Pump

APPLICATION AREA

This project products 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 fountains.

MATERIAL OF PARTS

Outlet: stainless steel
Pump body: stainless steel
Motor body: stainless steel
Bearing: C&U

ADVANCED TECHNOLOGY

1. Application innovation
Compared with the traditional alternating current machine, the efficiency is improved 25% by the permanent magnetism, direct current, brushless, non-sensor motor.
2. Technics innovation
Adopt double plastic package for rotor and stator, motor insulation ≥ 300 MΩ, the motor security was much improved.
3. Structure innovation
Oil filling, convenient installation and environmental protection

HIGHLIGHTS

a. Energy-saving and environment-protected green products
b. High technique products adopting MPPT and DSP chip technique.
c. 100% copper wire, cold-rolled silicon steel sheet
d. CE certificate
e. Advanced three phase brushless DC motor
f. Stainless steel 316 screws
g. 3 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

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.

MODEL SELECTION

a. The power of solar panel = power of pump x1.3
   The voltage of solar panel = the voltage of pump
   The controller should be matched
b. Select the batteries according to the following formulas:
   The use hour of battery =
   The battery capacity ÷(the machine power÷the battery voltage)x0.6
   For example,the machine power is 200 W, the battery capacity is 100 AH, the voltage is 12 V, and the battery is fully charged, then the use hour is:100÷(200÷12)x0.6=3.6 hours
c. The battery capacity=
   the use hour ÷0.6x(the machine power÷the battery voltage) For example, the machine power is 200 W, the battery voltage is 12V, and the battery need to be used for 3.6 hours, then the battery capacity is:3.6÷0.6x(200÷12) =100 AH

SUNPOOL
Solar Pump

Type	Voltage V	Power w	Max Flow Rate m³/h	Max Head m	Inlet/outlet Inch
SUNPOOL 500/48	48	500	12	14	2"x2"
SUNPOOL 600/48	48	600	15	14	2"x2"
SUNPOOL 750/96	96	750	18	8	3"x3"
SUNPOOL 1000/110	110	1000	25	15	3"x3"

Type	Q m³/h	0	4	8	12	16	20	24
SUNPOOL 500/48	H (m)	14	8	5	2			
SUNPOOL 600/48		14	10	6	2			
SUNPOOL 750/96		8	7	6	5	3	2	
SUNPOOL 1000/110		15	13	10	8	6	4	1