



# Solar pumping System

## Note:

Solar motor powers the new system for the supply of clean water based on the most widely available renewable energy, the sun. It is designed for easy use and requires no maintenance. It is the ideal solution for supplying water in remote areas, where the normal power supply of electricity from the power grid is inconsistent or completely unavailable

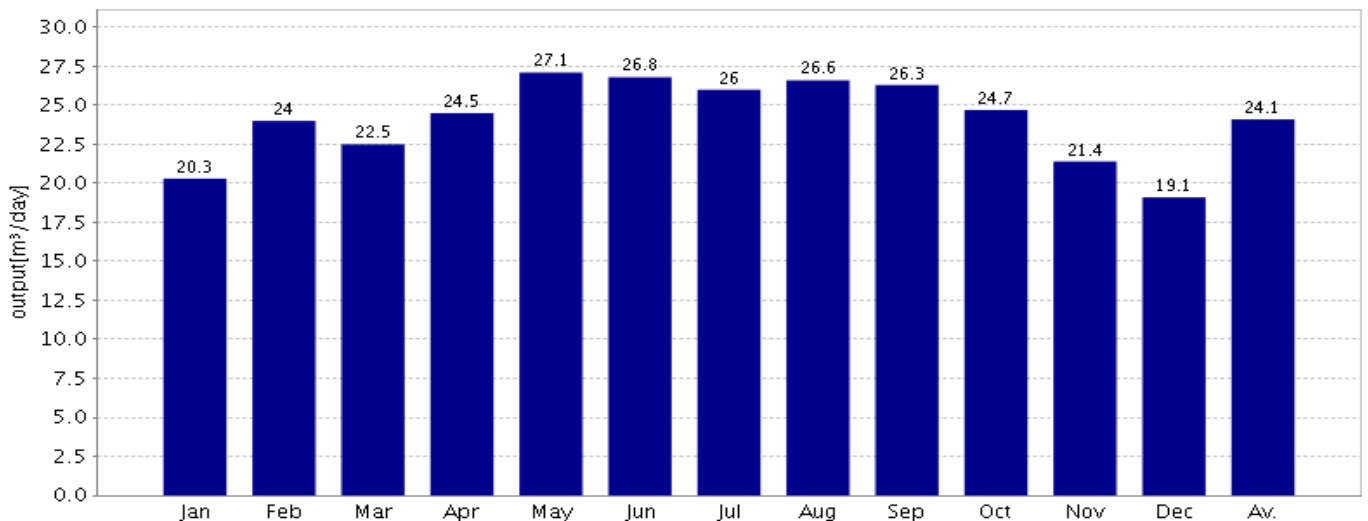
## Parameter

Location:	United Arab Emirates;Du bai	Water Temp:	25°C		
Required daily output:	20m <sup>3</sup> /day	Dirt loss:	3%	Motor lenght:	50
Pipe type:	Plastic	Static Head:	15m	Pipe length:	20m

## Products

Submersible pump	1pc;CPM146 -800W
Solar panel	3pc;900Wp;300w ×3pcs
Motor cable	
Pipeline	20m;Pipeline
Accessories	

## Daily output in average month (24.1) m<sup>3</sup>/day



Energy[kWh]	4.44	5.26	4.94	5.36	5.95	5.87	5.69	5.83	5.76	5.42	4.69	4.20	5.28
Irradiation[kWh/m <sup>2</sup> ]	5.48	6.49	6.10	6.62	7.34	7.25	7.03	7.20	7.11	6.69	5.79	5.18	6.52

## Solar Panel Wiring

## CPM146-800W

### Solar Surface Pump System

#### System Overview

Head	max. 35m
Flow	max. 92L/min
Recommend Max input Power	max. 0.8 kW
Minimum well diameter	min inch
Pump discharge	Rp 1"*1"
Efficiency Max	50%

#### Product advantage

- .voltage:60-110Vmp/150VOC
- .High efficiency BLDC motor
- .High efficiency MPPT and Vector control
- .Built-in controller
- .MPPT Efficiency Max.99%
- .Display of voltage/ current/power etc
- .Soft start running makes the system's life longer
- .Dry protection
- .Lost Phase protection
- .Stall protection
- .Error display

#### Technical Data

##### Controller CPM146-800W

- .Controller built-in
- .Over-load protection
- .Over temperature protection

##### Motor CPM146-800W

Voltage	DC max.VOC 150V DC Vmp 60-110V
Current	max.DC 15A
Motor Efficiency	max.85%
WaterTemp	max.40°C
Insulation class	F
Enclosure class	IP54
Speed	1000-4000

#### Pump End

- .Copper impeller
- .Cast iron housing

#### Standards



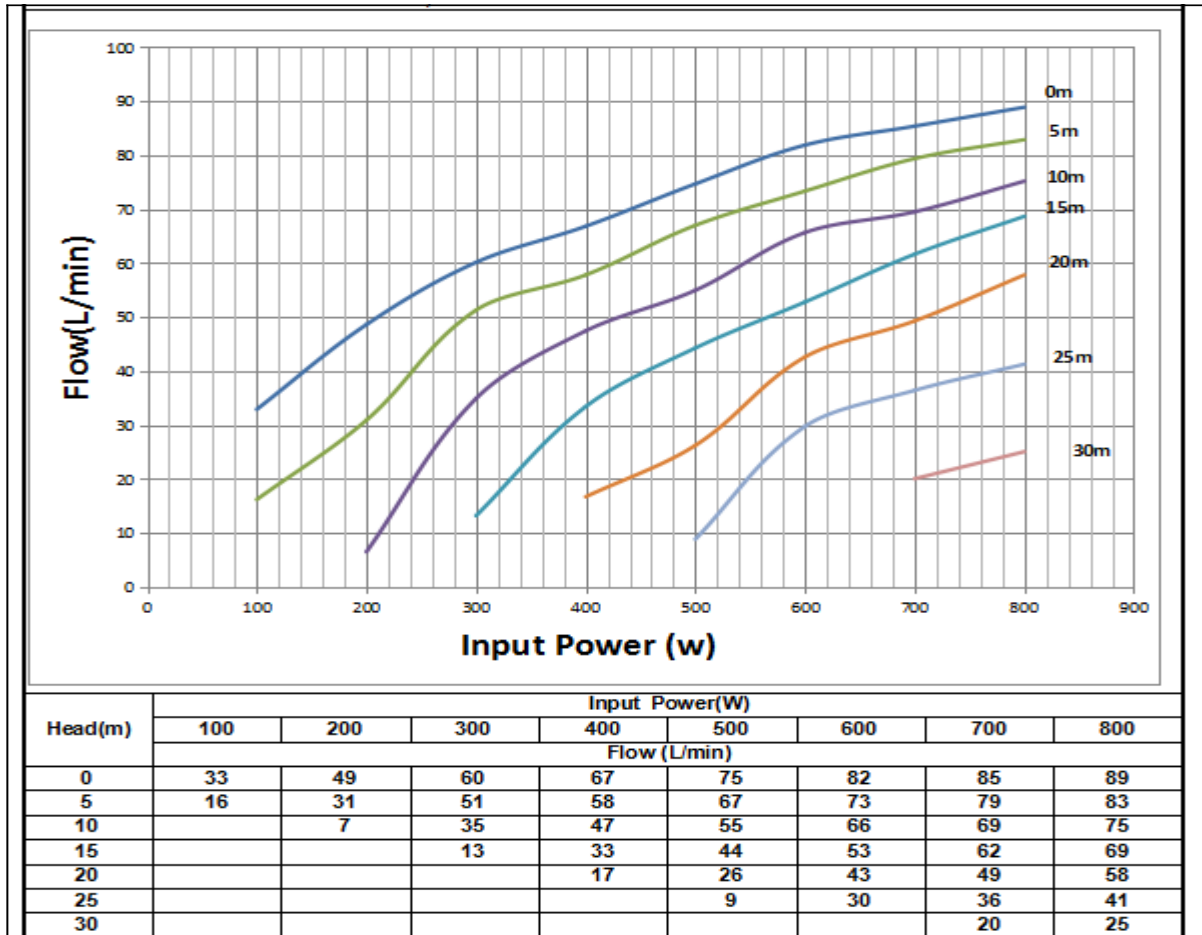
#### Note:

\*Recommend 3 Pcs of 340W Solar Panels in Series

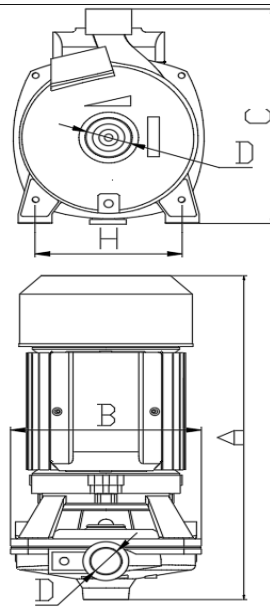
\*VOC (V) Volts open circuit nothing connected;Vmp (V) Volts maximum power point under load;Exceeding limits may cause serious harm or irreparable damage

\*The pump is IP54 Rated however it is recommended that it is not mounted in direct sunlight

**CPM146-800W**  
**Solar Pumping project**  
**Pump chart**



**Dimensions and Weights**



	Weight (kg)
Pump Unit	10
Pump Package Unit	10.5

	Package Volume
Pump	0.425m*0.245m*0.3m

Pump :

	A	B	C	D	H
Dimention (mm)	360	190	235	1"	160

**\*\*The size and weight information may be changed, please confirm with the factory.\*\***