

# Guide for selecting a compatible solar panel for your Futurepump

If you have not purchased solar panels from Futurepump directly, the following guidelines will help you choose solar panels for the most efficient functioning of your Futurepump solar pump.

## Details of panel provided by Futurepump

Situation	Standard light conditions	Low light (<600 W/m <sup>2</sup> )
<b>Panel type</b>	<b>60W Futurepump panel</b>	<b>90W Futurepump panel</b>
<b>Nominal Voltage</b>	18V	18V
<b>Panel Rated Voltage</b>	29.68V	30V
<b>Panel Rated Current</b>	2.03A	3A
<b>Open circuit Voltage</b>	35.22V	35V
<b>Short circuit Current</b>	2.14A	3.15A
<b>Number of panels needed for SF2</b> <b>Number of panels needed for SE1</b>	2 in series (29*2=58V) 1 (29V)	2 in series (29*2=58V) 2 in parallel (29V)

Futurepump solar panels are designed specifically for optimal functioning of the solar pump. They are not readily available in most markets. However, there are alternative panels which are readily available and selecting the right panel specifications will give you the best efficiency.

## What to specify when looking for a solar panel

Situation	Standard light conditions	Low light (<600 W/m <sup>2</sup> )
<b>Panel type</b>	<b>40W or 50W panel</b>	<b>60W-80W panel</b>
<b>Nominal Voltage</b>	12V	12V
<b>Panel Rated Voltage</b>	18V	18V
<b>Panel Rated Current</b>	2.23A	2.5A
<b>Open circuit Voltage</b>	21.6V	21.6V
<b>Short circuit Current</b>	2.4A	3A
<b>Number of panels needed for SF2</b> <b>Number of panels needed for SE1</b>	3 in series (18V*3=54V) 2 in series (18V*2=36V)	3 in series (18V*3=54V) 2 in series (18V*2=36V)

## Maximum voltage and amps which should not be exceeded:

	Maximum pump voltage	Maximum motor current
Futurepump SF2	60V DC	5 amps DC
Futurepump SE1	36V DC	4 amps DC

## Where to find panel information:

The details of the panel are found on the sticker on the back of the panel. You should look for a sticker similar to the example below:

