



User Manual

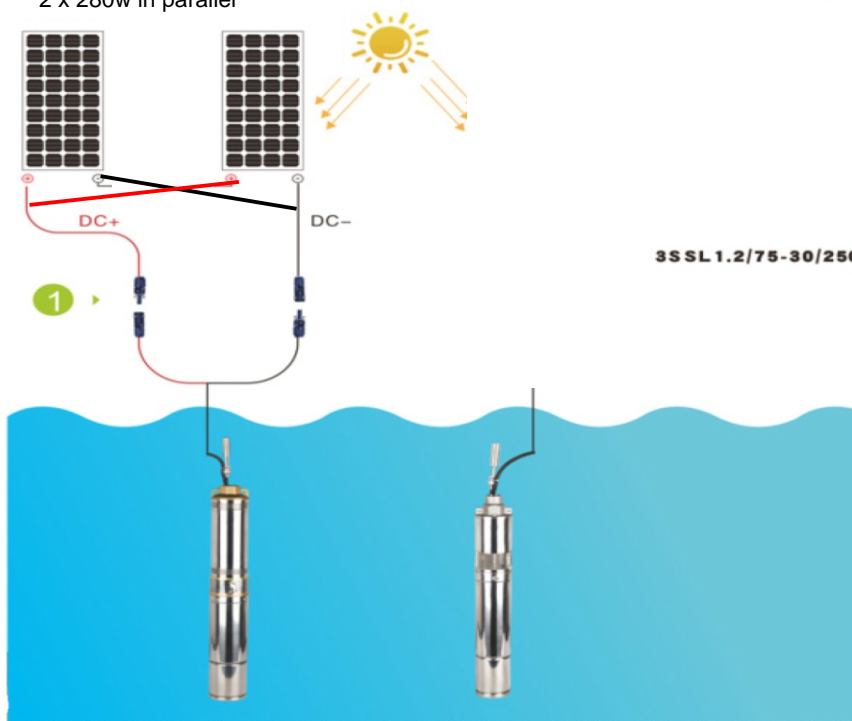


PROFESSIONAL SOLAR PUMP

SOLAR PUMP DC/Built - in

2 x 280w in parallel

- ✓ DC Brushless
- ✓ Built - in controller
- ✓ 2 Year Warranty



INTERNAL CONTROLLER

Brushless DC Solar Pump System

Pump Model Selection:

Please choose the model according to your pumping flow and pumping head and find the right model by reading carefully about testing report or performance chart.

Panel Selection & Connection:

For instance, customer decides a sample 24V-400W solar pump. Some rules can help to choose solar panel.

First, decide the panel power. Panel power should be at least 1.3 times of pump power. Otherwise, performance will not be perfect. When you make 1.3 times $400W=520W$, you need $\geq 520W$ panel and this panel power may be not available. So customer need to buy 600W panel if only 300W panel is available. And 600W panel can use longer than 520W panel during, working earlier in the morning and stopping later in the afternoon. And please do not exceed 2 times of solar pump power.

Second, decide the panel VMP voltage. On our controller request, panel VMP should at least the same voltage of pump voltage, here 24V. Please choose 1.5 times $24V=36V$. 36V VMP panel is working well with our controller. 1.2 times-1.5 times voltage VMP is good for pump voltage. You may consult with your supplier when it is higher than this voltage.

Third, connect the panel. Now we have 600W panel, i.e. 2 PCS 300W 36V VMP panels. To make a 36V and 600W panel array, please connect the two panels in parallel which will only double the power and current while voltage VMP is the same with 1 panel.

Solar pump Installation:

Check the list of solar pump set.

Including: Pump with cable, Controller inside the pump (Not visible), outlet, water level sensor (optional), tape, plastic impeller or screw (optional), manual book.

Install the internal controller solar pump with solar panel. Just connect cable line + & - to panel + & -. If there is a tank, place the tank water sensor into the tank.

Installation Diagram

