

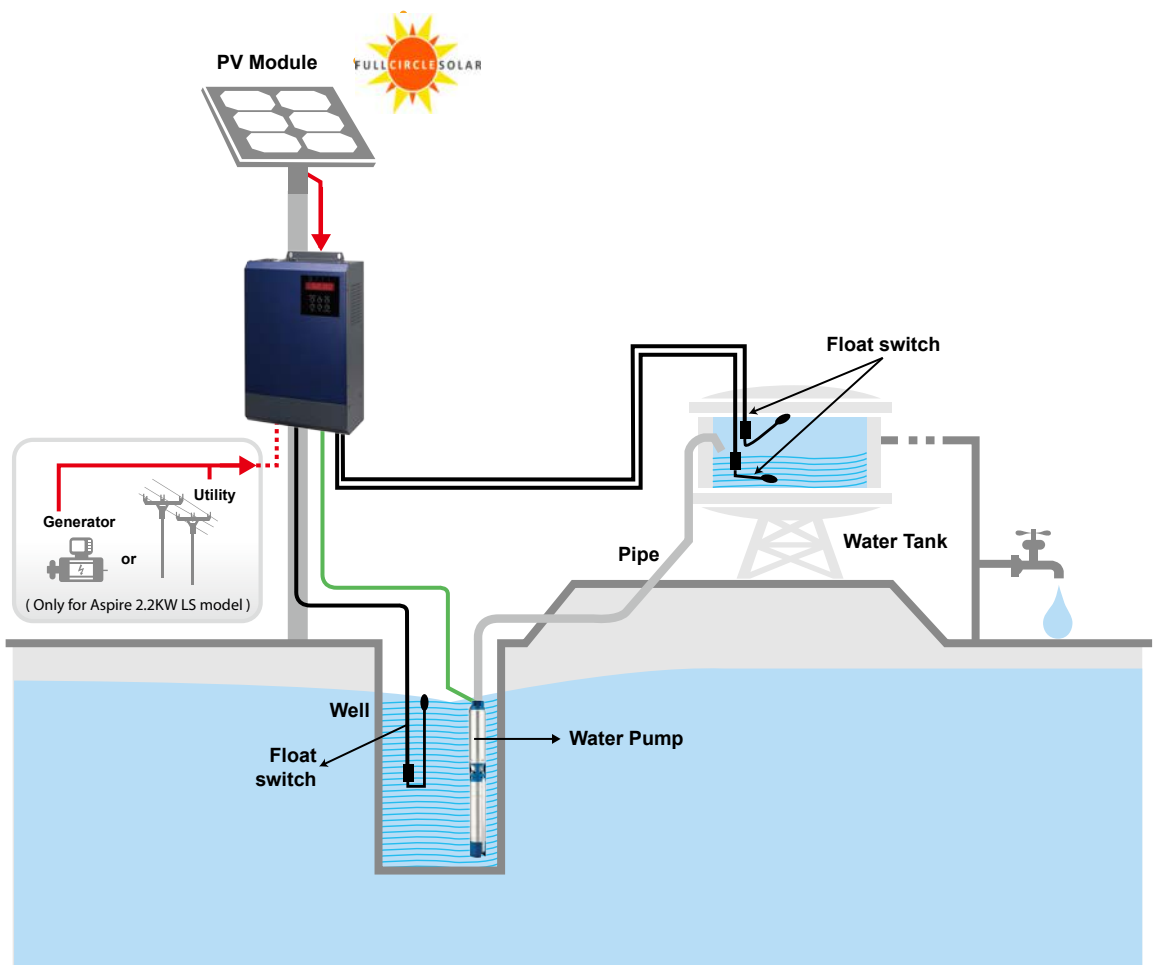


## FCS 220V ASPIRE BHC



- Built-in MPPT solar charger
- Supports single phase or three-phase asynchronous motor depending on models
- Supports single phase AC input when PV energy is not sufficient (only for Aspire 2.2KW LS model)
- Built-in full protection and self-diagnosis
- Soft start function prevents water hammer effect and extends system lifecycle
- Comprehensive LEDs and display screen for real-time system status
- Remote monitoring through RS-485
- Optional remote panel available

Aspire solar inverter is specially designed for water pump application. This solar inverter is built-in with MPPT solar charger to maximize solar power. Besides, it is easy to install with low maintenance cost. It becomes an eco-friendly solution for the rural areas where grid power is expensive and unreliable.





## Aspire Water Pump Solar Inverter Selection Guide

MODEL	Aspire 2.2KW LS	Aspire 2.2KW	Aspire 7.5KW	Aspire 11KW
<b>RATED OUTPUT POWER</b>	2200 W(3HP) (supports 0.75~3HP water pump)	2200 W(3HP) (supports 0.75~3HP water pump)	7500 W(10HP) (supports 3~10HP water pump)	11000 W(15HP) (supports 10~15HP water pump)
<b>PV INPUT (DC)</b>				
Maximum DC Voltage	450 VDC		800 VDC	
Start-up Voltage	120 VDC		250 VDC	
Recommended MPPT Voltage Range	120 VDC ~ 450 VDC		500 VDC ~ 600VDC	
Number of MPP Trackers			1	
<b>AC INPUT</b>				
Input Voltage	220/230/240 VAC (-15% ~ +10%)		N/A	
Input Frequency	1			
<b>OUTPUT</b>				
Nominal Voltage	220/230/240 VAC		3 x 380/400/415/440 VAC	
Efficiency	47 Hz ~ 63 Hz		> 97%	
Nominal Output Current	14 A	10 A	5.0 A	15 A
Motor Type	Single-phase motor	Three-phase asynchronous motor		
Frequency Precision			±0.2%	
<b>PROTECTION</b>				
Full Protection	Phase lost, dry pumping, motor locked, weak sunlight, over-voltage, under-voltage, over-current, surge, over-temperature and short circuit protection			
<b>PHYSICAL</b>				
Dimension, D X W X H (mm)	110 x 230 x 342			
Net Weight (kgs)	5	5.5	6	6.5
IP Protection	IP20			
<b>INTERACE</b>				
Communication Port	RS-232/RS-485			
<b>ENVIRONMENT</b>				
Humidity	< 95% RH (Non-condensing)			
Operating Temperature	-20°C~45°C at 100% full load, 46°C~60°C power derating			

Product specifications are subject to change without further notice.

## Recommended Solar Panel Selection

Below are popular solar panel specifications in the market:

- A. 75-A: 75W, Vmp=17.46V, Imp=4.3A, Voc=21.96V      C. 140-A: 140W, Vmp=17.9V, Imp=7.82A, Voc=22.0V  
 B. 75-B: 75W, Vmp=13.3V, Imp=5.64A, Voc=16.94V      D. 250-A: 250W, Vmp=30.64, Imp=8.16A, Voc=37.38V

Inverter Model Solar Panel	2.2KW LS for single-phase output	2.2KW LS for three-phase output	2.2KW	7.5KW	11KW
PV Panel 75-A	19 pieces in Series x 4 Strings (5700W PV Panels)	19 pieces in Series x 2 Strings (2850W PV Panels)	32 pieces in Series (2400W PV Panels)	N/A	N/A
PV Panel 75-B	25 pieces in Series x 3 Strings (5625W PV Panels)	25 pieces in Series x 2 Strings (3750W PV Panels)	42 pieces in Series (3150W PV Panels)	N/A	N/A
PV Panel 140-A	19 pieces in Series x 2 Strings (5320W PV Panels)	19 pieces in Series (2660W PV Panels)	N/A	32 pieces in Series x 2 Strings (8960W PV Panels)	32 pieces in Series x 3 Strings (13440W PV Panels)
PV Panel 250-A	11 pieces in Series x 2 Strings (5500W PV Panels)	11 pieces in Series (2750W PV Panels)	N/A	19 pieces in Series x 2 Strings (9500W PV Panels)	19 pieces in Series x 3 Strings (14250W PV Panels)