



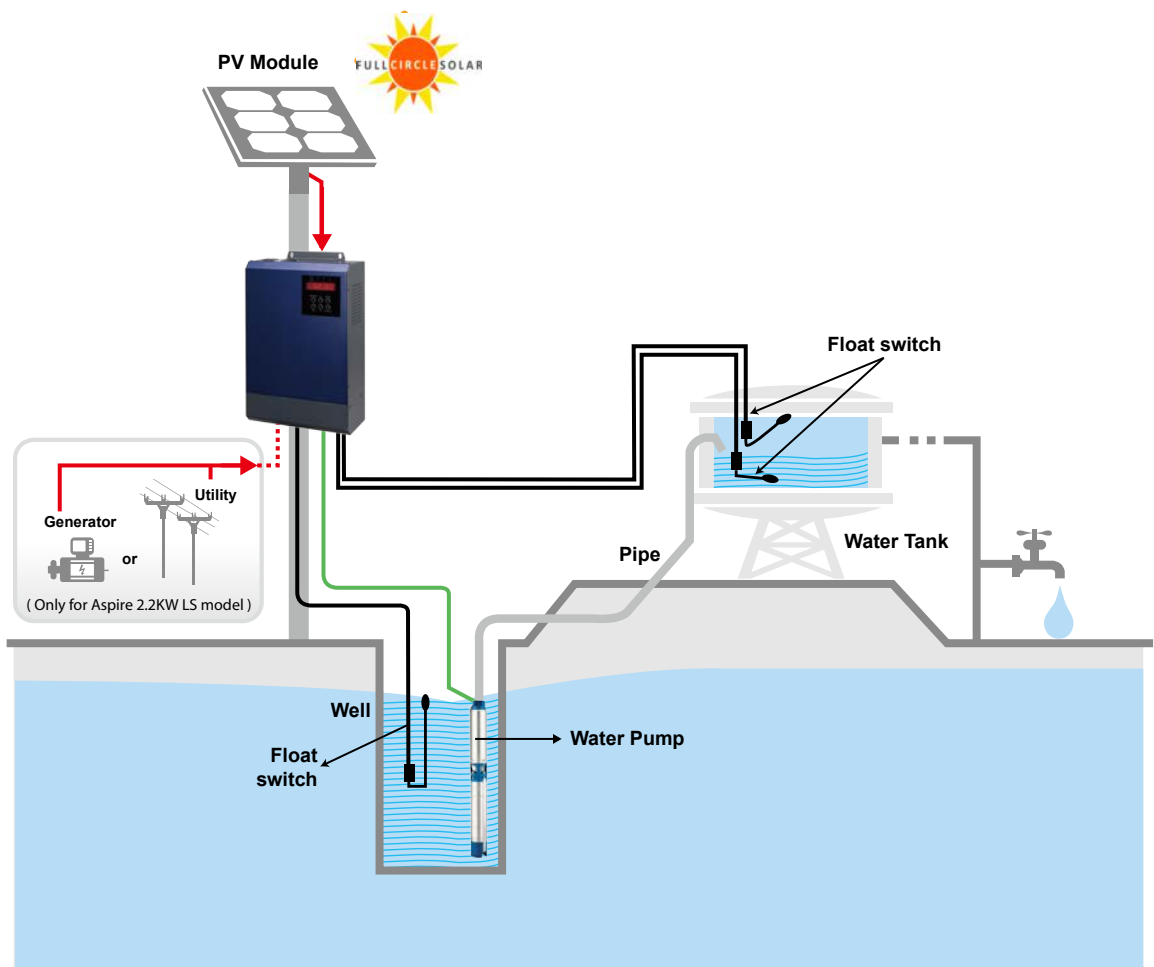
FCS 220V ASPIRE BHC



- 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

WATER PUMP INVERTER

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
RATED OUTPUT POWER	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)
PV INPUT (DC)				
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	
AC INPUT				
Input Voltage	220/230/240 VAC (-15% ~ +10%)		N/A	
Input Frequency	1			
OUTPUT				
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%	
PROTECTION				
Full Protection	Phase lost, dry pumping, motor locked, weak sunlight, over-voltage, under-voltage, over-current, surge, over-temperature and short circuit protection			
PHYSICAL				
Dimension, D X W X H (mm)	110 x 230 x 342			
Net Weight (kgs)	5	5.5	6	6.5
IP Protection	IP20			
INTERACE				
Communication Port	RS-232/RS-485			
ENVIRONMENT				
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)