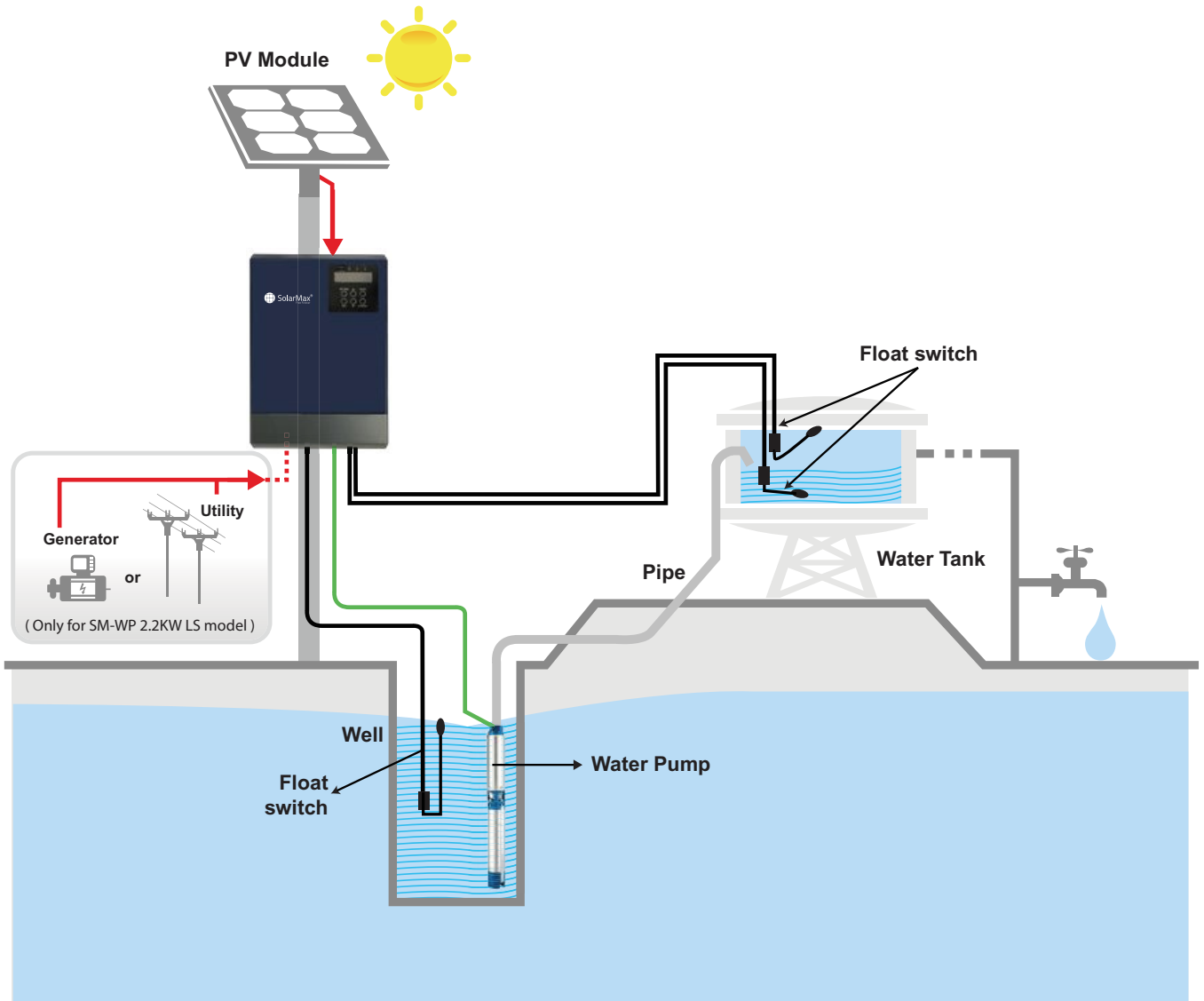


SolarMax Solar Inverter for Water Pumps / Tubewells



- Built-in MPPT solar charger
- Supports single phase or three-phase asynchronous motor depending on models (surface & submersible)
- Supports single phase AC input when PV energy is not sufficient (only for SM-WP 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

SolarMax solar water pump inverter is especially 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.



SolarMax Water Pump Solar Inverter Selection Guide

| MODEL | SM-WP-2.2K LS | SM-WP-2.2K | SM-WP-7.5K | SM-WP-11K | |
|---|---|---|--|--|------|
| 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) | | | | | |
| Nominal DC Voltage / Maximum DC Voltage | 320 VDC / 450 VDC | 540 VDC / 800 VDC | | | |
| Start-up Voltage | 120 VDC | 250 VDC | | | |
| MPPT Voltage Range | 120 VDC ~ 420 VDC | 250 VDC ~ 780VDC | | | |
| Number of MPP Trackers | 1 | | | | |
| AC INPUT | | | | | |
| Input Voltage | 220/230/240 VAC (-15% ~ +10%) | N/A | | | |
| Input Frequency | 47 Hz ~ 63 Hz | | | | |
| OUTPUT | | | | | |
| Nominal Voltage | 220/230/240 VAC | 3 x 380/400/415/440 VAC | | | |
| Efficiency | > 97% | > 97% | | | |
| Nominal Output Current | 14 A | 10 A | 5.0 A | 15 A | 22 A |
| Motor Type | Single-phase motor | Three-phase asynchronous 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) |

