

## APOLLO SPN-series

### Stand-alone Solar Pump Inverter



#### Reliability

- Integrated with PWM and MPPT control
- Pump dry running protection
- Surge protection according to IEC 61000-4-5
- ISO 9001 and ISO 14001 certified factory

#### Cost effectiveness

- No engine, not consume fuel
- No battery needed

#### Flexibility

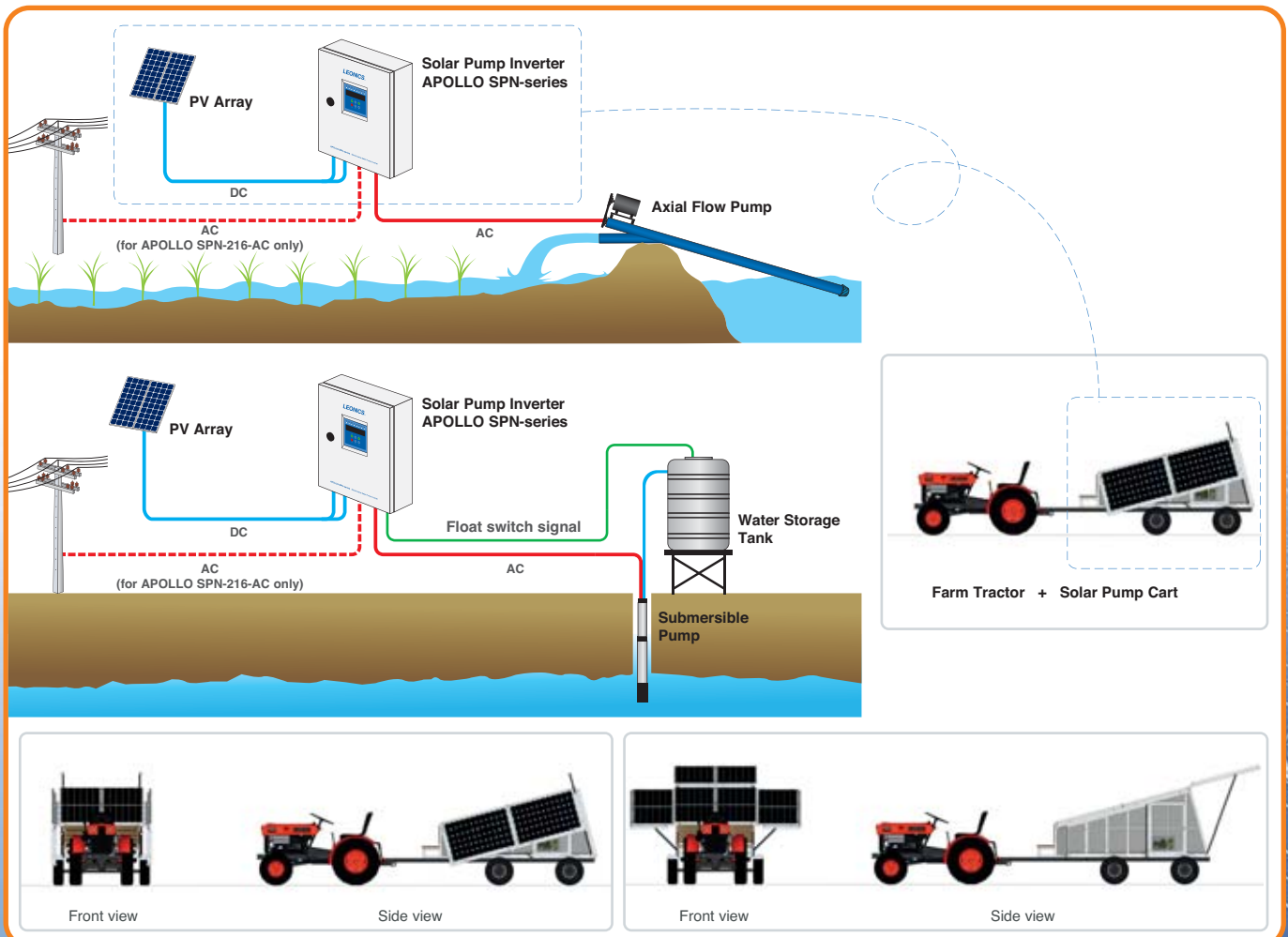
- Compatible with single phase PSC and multi-phase AC induction motor pump (0.5 - 3 HP)
- Suitable for variable pump type such as submersible pump, centrifugal pump or axial flow pump
- Wide PV input voltage range for accepting multi PV strings configuration and different type of PV module (depending on motor pump rating)
- Automatic switch to utility power when PV power is not sufficient to operate pump (only APOLLO SPN-216-AC)
- Adjustable voltage and frequency

#### Smart

- Automatic PV voltage detection
- Low starting current and high starting torque
- Easy installation and pump connection

#### Application

- Solar pumping cart as optional for using with farm tractor
- Suitable for livestock watering and agricultural irrigation



## APOLLO SPN-series Solar Pump Inverter

MODEL		SPN-216	SPN-216-AC	
RATED POWER	PV input	3 kWp		
	AC Output	220 Vac, 3 Horsepower		
PV INPUT	MPPT voltage range ( $V_{mp}$ )	100 - 420 Vdc		
	Maximum open circuit voltage ( $V_{oc}$ )	440 Vdc		
	Maximum PV input current	12 A		
AC INPUT	Voltage and frequency	-	*220 Vac, 50 / 60 Hz	
AC OUTPUT	Voltage	100 - 220 Vac		
	Frequency	5 - 65 Hz		
	Pump	1-phase PSC	220 Vac, 50 / 60 Hz, 0.5 - 2 HP	
		2-phase or PSC without capacity run	220 Vac, 50 / 60 Hz, 0.5 - 3 HP	
	3-phase	220 Vac, 50 / 60 Hz, 0.5 - 3 HP	-	
EFFICIENCY	Inverter peak efficiency	97%		
PROTECTION		Under voltage shutdown, Over voltage shutdown, Over current, Lightning protection In and Out (IEC 61000-4-5), Pump dry running		
INDICATOR	LED	Run, Stop, Auto, In, Out, Float Switch, Program, Error		
	7-Segment LED display	PV voltage, DC bus voltage, Motor current, Motor frequency Temperature, Time, Error (Inverter over current, Motor phase loss, Over voltage, Low PV voltage, High motor current (Motor overload), Low motor current (dry run), High temperature), Setting		
COOLING SYSTEM		Natural convection		
ENVIRONMENT	Temperature	5 - 40°C		
	Relative humidity	0 - 95 % (Non - condensing)		
DESIGN STANDARD	Enclosure type	IP54		
DIMENSION	W x H x D (mm)	280 x 350 x 150		
WEIGHT	Approximate in kg.	9.2		

\* The APOLLO SPN-216-AC can operate with only 1-phase and 2- phase motor pump. Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

### Variable & Flexible:

- Can use with wide range 0.5 - 3 HP of AC induction pump.
- APOLLO SPN-216 can operate with single phase, 2-phase or 3-phase motor.
- APOLLO SPN-216-AC can operate with single phase or 2-phase motor.
- Suitable for variable pump type such as submersible pump, centrifugal pump or axial flow pump.



Authorized Distributor

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