

SP SOLAR

FOR SUSTAINABLE
IRRIGATION



GRUNDFOS SOLAR WATER SOLUTION CAN INCREASE CROP YIELDS AND ENSURE EFFECTIVE WATERING FOR LIVESTOCK

Grundfos solar water solution helps farmers to get freedom from power cuts and any interruption due to poor grid power quality. Poor power quality often causes pump failure which disrupts the water supply for irrigation.

With Grundfos solar water solution, farmers become more self-reliant and choose to water their crops when it is most required there by increasing their crop yield. Zero energy cost and reduced maintenance cost keep the overall operating cost extremely low. Increased productivity and reduced operating cost make the solar water solution economically sustainable.

APPLICATIONS

- Drip and sprinkler irrigation
- Flood and pivot irrigation
- Livestock watering
- Wildlife and game farms
- Pumping to tank
- Domestic water supply

TECHNICAL SPECIFICATIONS

Max. flow rate:	30 m ³ /hr
Max. head:	180m
Ambient temperature:	0°C to +60°C
AC Input	3Ph, 380 - 415V, 50Hz
DC Input (MPPT Voltage range)	220 - 750Vdc
Motor Power	3.7 kW to 7.5 kW
Pump enclosure class:	Motor: IP68 Controller: IP65

- It is recommended to use du/dt filters (Choke coils) for heads above 50m to reduce voltage spikes and increase motor life

SP SOLAR SYSTEM



THE PUMP

With its unsurpassed reliability, Grundfos's SP is the obvious choice that features improved sand resistance, longer life and best in class energy efficiency

BENEFITS

- Reliability proven in the market for more than 50 years
- Superior hydraulic design for greater energy efficiency
- Wide range of flow sizes
- 100 % stainless steel (304) construction offers better corrosion resistance

THE MOTOR

The MMS4P motors are compact, robust and offer more water per watt peak.



BENEFITS

- Permanent magnet technology for higher energy efficiency
- Easy rewindable & repairable water filled design
- Increased temperature rating (standard 60 °C) for wider application use and longer lifetime
- 100 % stainless steel (304) construction offers better corrosion resistance



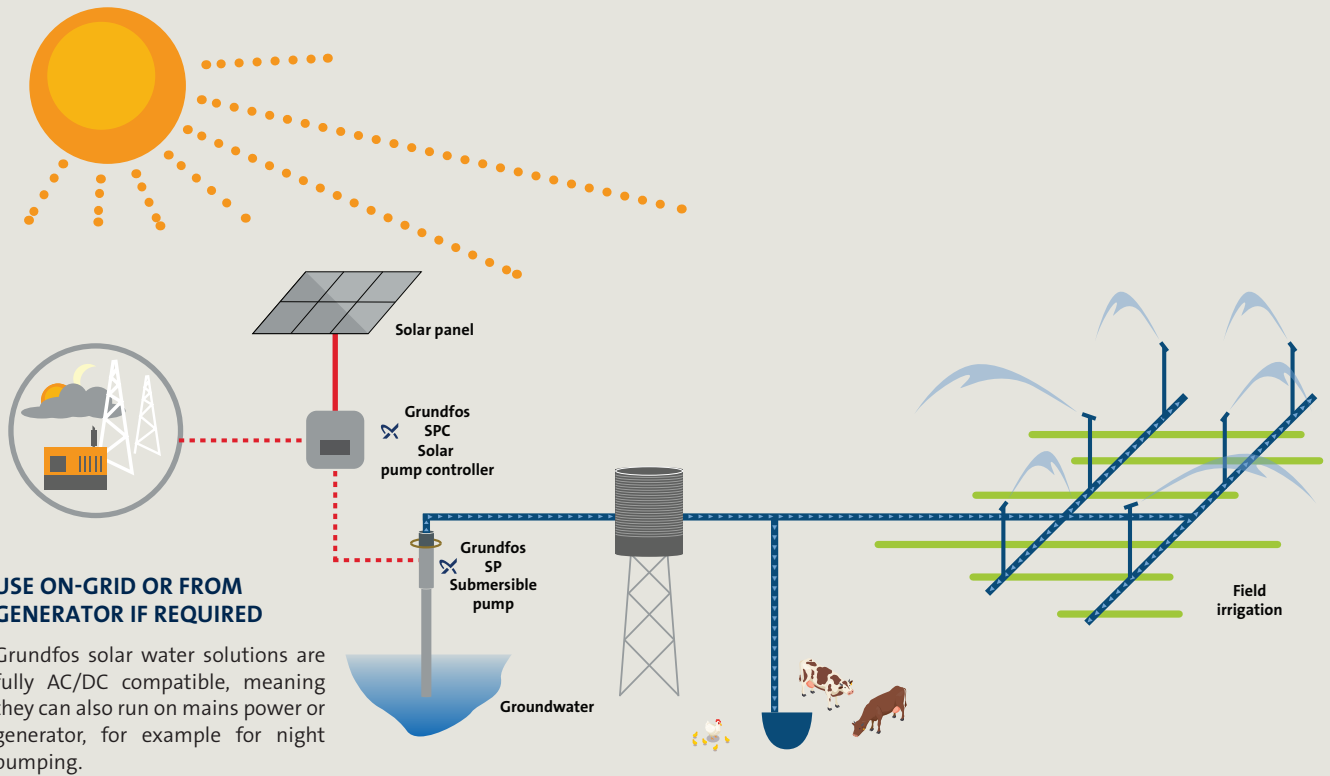
THE SOLAR PUMP CONTROLLER

SPC – An intelligent off grid solar pump controller, tested together with SP and forms a perfect fit for Grundfos submersible pump

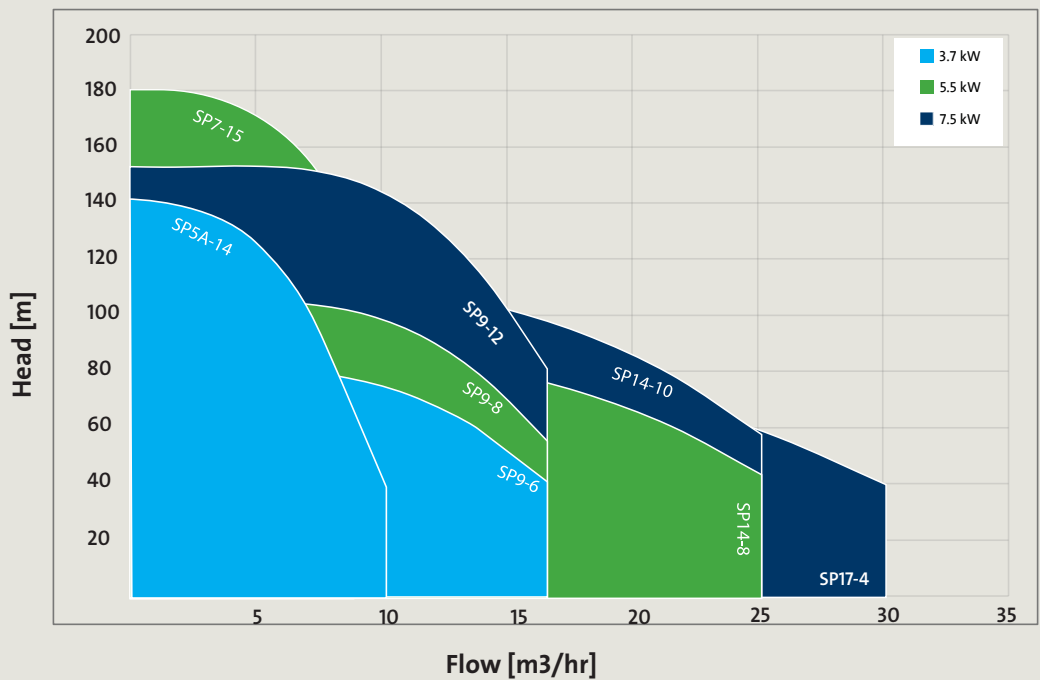
Benefits

- 99% MPPT efficiency
- Can run on both PV array input (DC) and regular grid input (AC)
- Boost converter feature helps early start & late stop
- Protection against power oscillation due to rapid cloud movement
- Rust free and natural cooling through heatsink ensures longer life of electronic component

GRUNDFOS COMBINES THE PUMPS, CONTROLS AND MONITORING, SOLAR PANELS AND COMPONENTS REQUIRED FOR A COMPLETE SOLAR-POWERED WATER SUPPLY



PERFORMANCE CURVES



ABOUT GRUNDFOS SOLAR WATER SOLUTIONS

Grundfos is a global leader in advanced pump solutions and a trendsetter in water technology. We contribute to global sustainability by pioneering technologies that improve quality of life for people and care for the planet. With an annual production of more than 16 million pump units and more than 80 companies in 55 countries, we offer a full range of modular, energy-efficient and intelligent products and services for applications within buildings, industries and water.

Grundfos Solar Water Solutions consist of a broad range of proven products that build robust and reliable solar water supply systems with long product life, low maintenance and manageable service requirements. A highly optimised Grundfos solar water solution offers low risk for your investment with low operating costs and no energy costs.

For more information, please visit grundfos.com/

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