

# SF2 SOLAR IRRIGATION PUMP SYSTEM

The Futurepump SF2 is a robust surface pump designed to help smallholder farmers with shallow water sources pump up to 1 litre per second of water to their crops using the power of the sun.

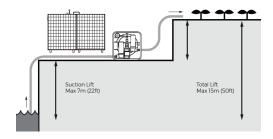


The Futurepump SF2 has three main parts: the PV panels which convert sunlight into electrical energy to drive the DC motor, a specially-designed unit coupled to a flywheel, which drives a pump, a reciprocating, positive displacement, high efficiency piston pump.

#### **BENEFITS**

- No fuel or electricity costs
- Robust, and farmer-fixable (as simple as a bicycle)
- Designed with easy maintenance in mind
- Pumps enough to irrigate around an acre
- Ideal with tanks, sprinklers, hoses or drip systems
- Removable, folding PV panels reduces theft risk
- Supplied with 80W panel, upgradable to 120W
- Solar panel tilting system for best performance
- No damage caused by dry pumping
- Tolerant of grit, sand, mud and debris
- 5V USB charging socket for phones

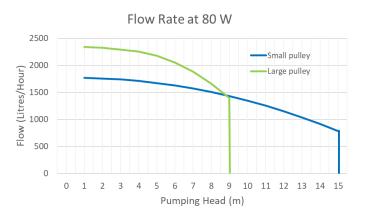


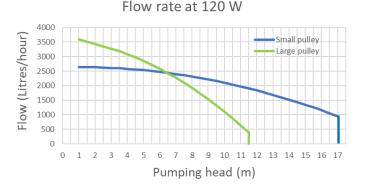


#### PERFORMANCE

At shallow heads, the Futurepump SF2 can deliver up to 1 litre per second, which is 3,600 litres/hour or over 21,000 litres per 6-hour pumping day (120W input).

	1 metre lift	6 metre lift
80W input	2,200 litres/hr	2,000 litres/hr
120W input	3,600 litres/hr	2,500 litres/hr





- Inlet side vertical suction limit: 7 metres
- Maximum total vertical lift: 15 metres
- Horizontal discharge: 500m+
- Peak system efficiency: 70%

# ELECTRICAL / MECHANICAL

- Maximum pump voltage: 60V DC
- Maximum motor current: 5 amps DC
- Piston diameter: 104mm
- Inlet/outlets designed for 11/4 (32mm) pipe
- Displacement volume per stroke: 150cm<sup>3</sup>
- Normal flywheel RPM range: 100-250 rpm
- 90mm pulley gear for 0-8m pumping heads
- 50mm pulley gear for >8m pumping heads



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#### REMOTE MONITORING

Every Futurepump SF2 pump includes remote performance monitoring at no extra cost.



- Minute-by-minute monitoring of pump vital signs technical data displayed on a web dashboard accessible to distributors
- Monitoring of pump utilisation, including litres of water pumped, potential area irrigated, fuel savings, kWh produced,
- Pump geo-location tracking using google maps

# PAY-AS-YOU-GO READY

- Ability for remote on-off switching (in seconds)
- Software integrations with leading PAYG management and billing platforms including Angaza, and other proprietary systems.



# WEIGHT & DIMENSIONS

- Pump weight: 19.5kg
- Pump dimensions: 520mm x 530mm x 200mm
- Carton weight (incl 80W PV & suction pipe): 36.7kg

- Carton dimensions: 580mm x 360mm x 740mm
  Carton volume: 0.150 CBM
- Supplied flexible inlet/suction pipe: Internal diameter of 31.8 mm, external diameter 38.8mm.
   6000mm length

# SPARE PARTS & TOOLS

- 3 x spare transmission belts
- 3 x spare piston seals
- 4 x adjustable hose clips
- 2 x 1<sup>1/4</sup> inch pipe couplers
- 2 x 1<sup>1/4</sup>" -> 1<sup>1/2</sup> inch reducers
- 1 x inlet filter/strainer
- 1 x pack stuffing box graphite packing rope
- 1 x complete set of spare o-ring seals

**Toolkit:** Three sizes of spanner, double ended screwdriver. Complete disassembly and reassembly possible with these tools.

# STOCKISTS & PRICING

To find your nearest SF2 stockist and local pricing, please visit <a href="www.futurepump.com">www.futurepump.com</a>. For information on becoming a distributor in your country, please visit <a href="www.futurepump.com/distribute">www.futurepump.com/distribute</a>

Futurepump Ltd is proudly supported by Practica, iDE, USAID Powering Ag, AECF, REEEP and Village Capital.

#### WARRANTY & CERTIFICATION

The SF2 is supplied with a full five year manufacturer-backed warranty, which means servicing and parts will be provided free of charge to our customers over that period through our network of certified distribution partners.

The best support can be provided by warranty registration upon purchase via <a href="http://warranty.futurepump.com">http://warranty.futurepump.com</a>

The SF2 is manufactured in India by Futurepump in our factory which uses an ISO 9001:2015-certified quality management system.