

LORENTZ S1-200 SOLAR POWERED SUBMERSIBLE WATER PUMP

SPECIFICATION SHEET



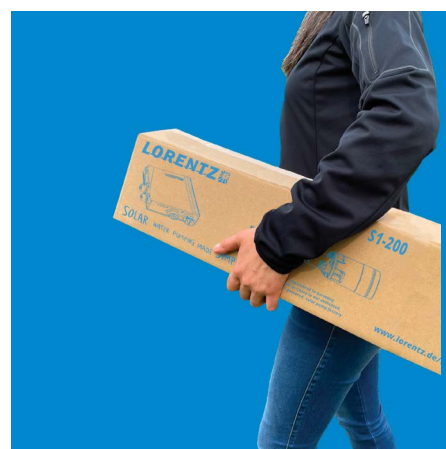
A small system with big performance

S1-200 pump systems have market-leading efficiency, delivering more water for your off-grid application using only the power of the sun. You can pump more than 27,000 liters [7,100 US gal] per day with one 200 Wp PV module. Motor and pump end are made of high quality materials for durability and reliability.



Quick and easy self install

S1-200 is a complete system in a box. Installation is very easy, just connect the plugs and start pumping water. Even the pipe connection fits standard 1" hoses, so no special connections to contend with.



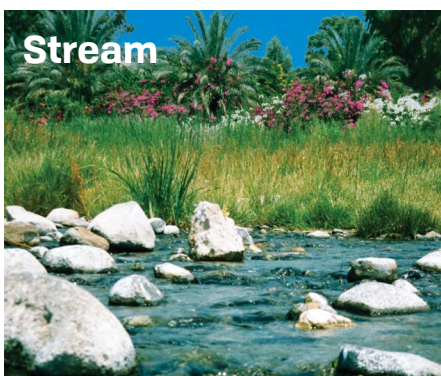
Portable and flexible in use

S1-200 is compact and lightweight, ready to take away and carry under your arm. The system can be permanently installed or used in applications where it is moved everyday. The submersible pump is selfpriming and can be used in open water or wells. Just drop in the pump and start pumping.

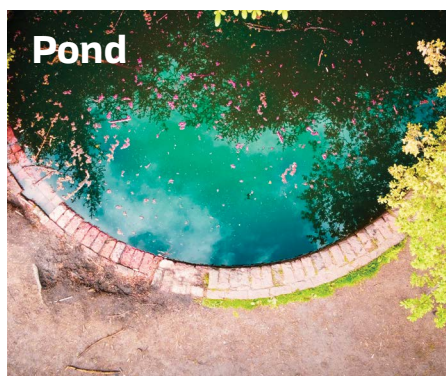
Pump Water From Any Source



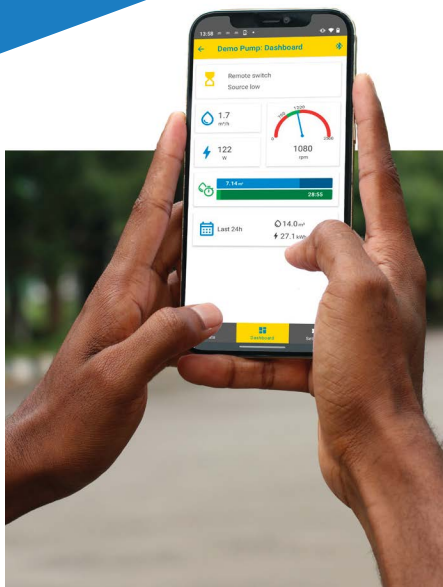
Well



Stream

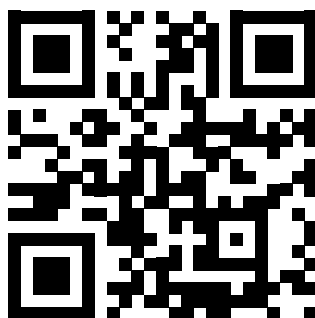


Pond



App control & monitoring

With the LORENTZ S-Connect App you can control and monitor your pump system. S-Connect gives you advanced settings such as speed control, daily amount targets and timers to automate pumping schedules. The app also monitors performance over time and assists with product support.



The S1-200 system includes

- Helical rotor pump with high efficiency DC brushless motor.
- pre-attached 15 m [50 ft] motor cable to plug into the controller.
- S1-200 mini controller with accessory inputs for dry run protection and tank full switch or remote tank switch.
- PV module adapter to use any standard PV module (max. 55 VDC).
- A hose clamp.
- One pair of screws for mounting the controller to the PV module.

Pump Water For Any Application

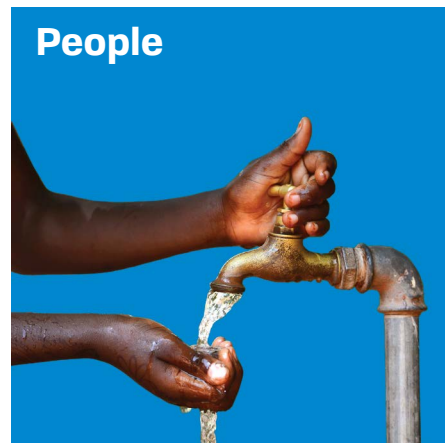
Livestock



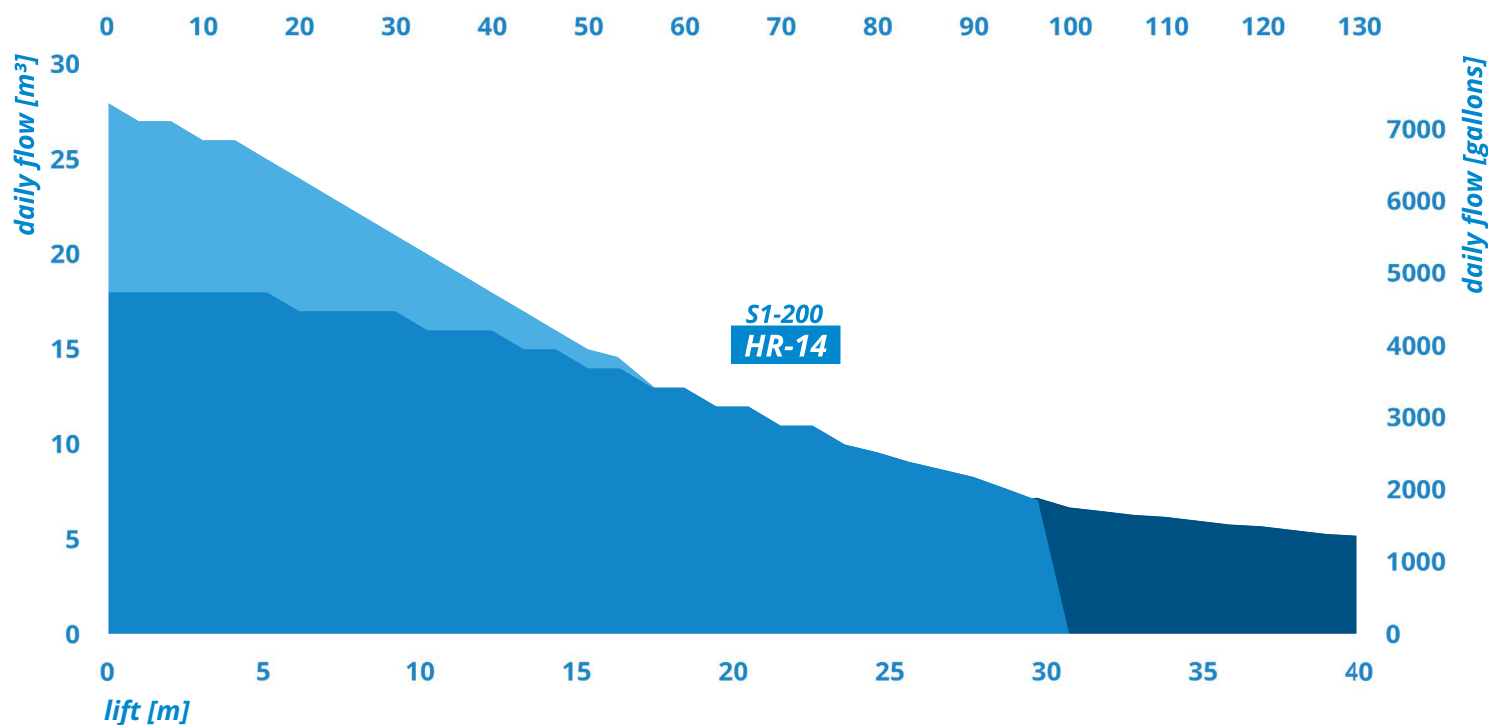
Irrigation



People



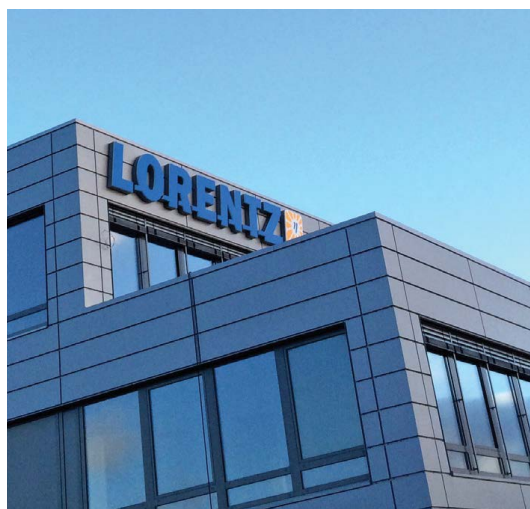
Daily Performance



Data provided is the annual daily average based on using a single 375 Wp PV module at location 15N 0E.

There are three pump variants that cover the range of head and flows.

Built by LORENTZ



LORENTZ is the global market leader in solar powered water pumping solutions. Founded in Germany during 1993 LORENTZ has pioneered, innovated and excelled in the engineering and manufacturing of solar powered water pumping. Today LORENTZ is active in over 130 countries through a dedicated network of professional partners.

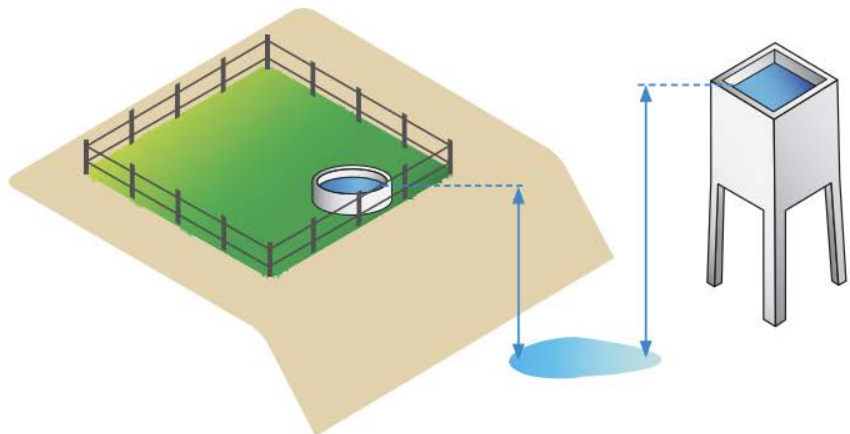
LORENTZ S product range is specially designed to bring solar pumping to the widest audience. LORENTZ S products take the experience, quality, reliability and efficiency of LORENTZ world leading solar pumps and simplifies them for self installation. Millions of people, their animals and crops rely on LORENTZ pumps every day.

GETTING YOUR PUMPS WATER LEVEL CORRECT

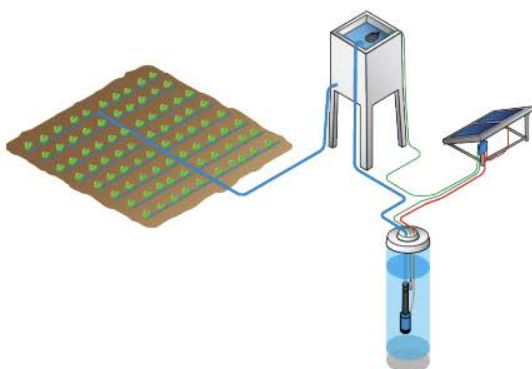
It is important to measure from the surface of the water, if the pump is submerged 10 metres that does not count, a common mistake is to talk about well depth and not water level, the pumps work only starts when the water is lifted above the surface. A good way to think of this is if you were carrying a bucket of water while walking in a swimming pool, it is not heavy until you lift it out of the pool.

Measure the vertical distance between the water level you are pumping from to the highest point you are pumping to. Even for a deep well use the water level and not the depth of the well.

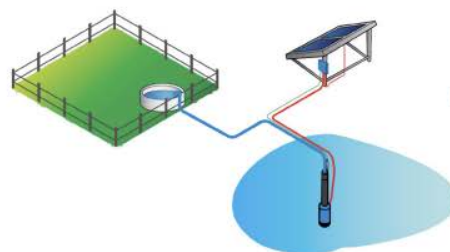
_____ metres



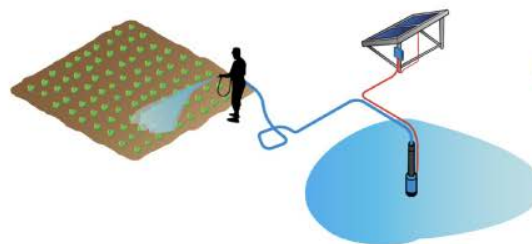
Choose which of the following solutions below best matches your planned use. Add the recommended meters to your pumping height.



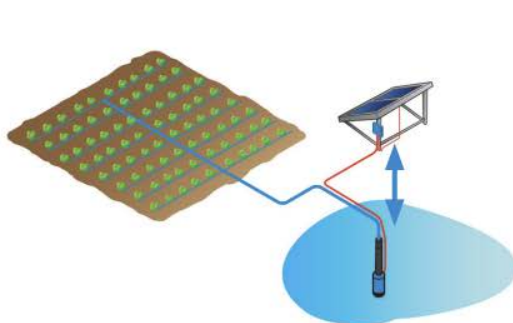
or



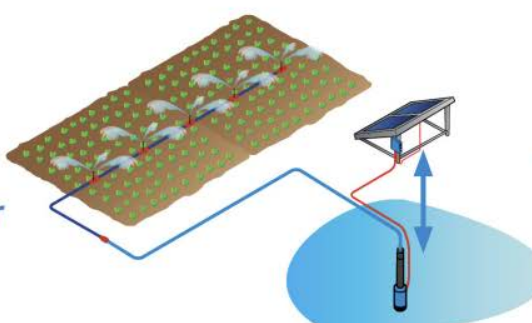
+0 metres



+3 metres



or



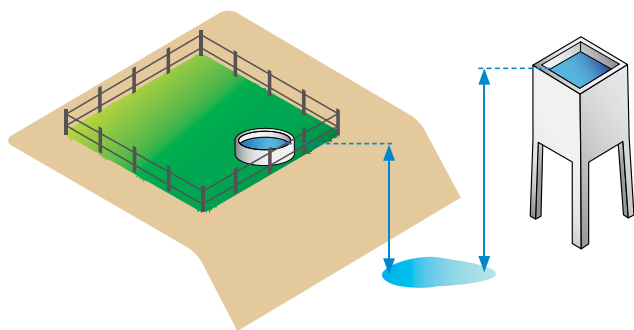
+10 metres

HOW MUCH WATER WILL MY SYSTEM PUMP?

To estimate the water output of your LORENTZ S system, you first need to calculate the total head.

Total Head = Vertical lift + additional head (if required) + pipe friction loss

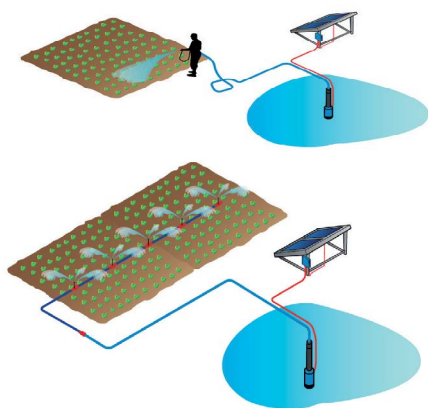
Step 1 - Measure the vertical lift



Measure the vertical distance from the water level in the well to the highest point where the water will be delivered. Use the water level, not the depth of the well.

Vertical lift: ____ m

Step 2 - Add extra head (if required for your application)



Hose irrigation: **add 3 m**

Pipe irrigation: **add 10 m**

Step 3 - Calculate pipe friction loss



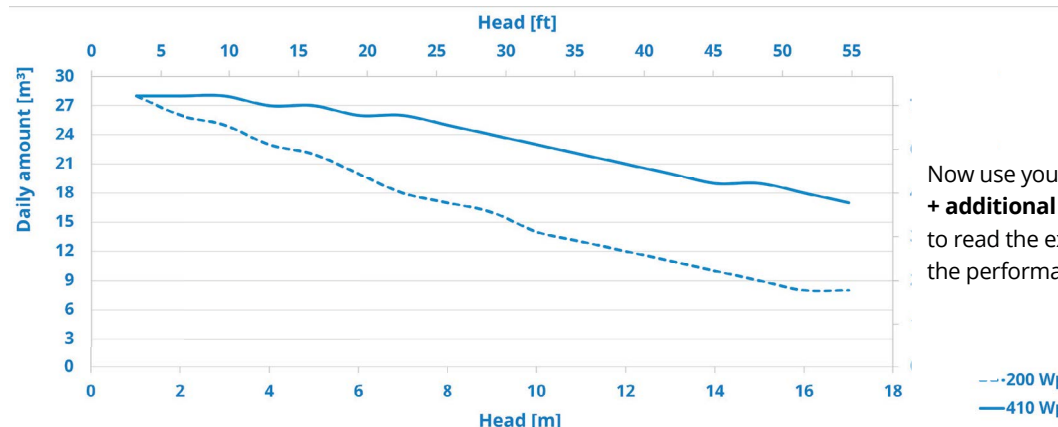
25 mm pipe:

Total length of pipe: ____ m x 0.05 = ____ m
(pipe friction loss)

32 mm pipe:

Total length of pipe ____ m x 0.02 = ____ m
(pipe friction loss)

Step 4 - Calculate your total head to see your water output



Now use your **Total Head (Vertical lift + additional head + pipe friction loss)** to read the expected water output from the performance chart.