

PONDS

Harness the sun to fill and aerate your pond for **free**. With the rising cost of grid power, more and more ponds are being filled with solar-powered pumps. See more fish, ducks, and happy animals. Stay on top of evaporation even in heat. **And say goodbye to big electric bills.**

“ We installed a Pro Series pump system and couldn't be happier. The company was extremely helpful setting up my challenging system, they really stand behind their word and their great systems. ”
Liz, CA

“ The system is working great and with the battery backup we are pumping 4 gallons a minute, 350 feet up a 70 foot hill to the pond. In the year we have had it running the spring water has maintained the pH and lowered the water temperature making the fish thrive. Thanks again. ”
Jeffrey, OK

PONDS



Real Customer

Estimating Pond Volume

Calculating pond dimensions doesn't generally need to be an exact science, but having an estimate of the area and volume is helpful especially if you are creating a new pond. To calculate the days required to fill a pond with your solar pump, divide the numbers in the table on the right by the estimated gallons per day for your selected pump (assuming your well can support that GPM). If you want to supplement power at night with a generator for the first few days, the pond will fill 3 to 4 times faster.

	Average Pond Depth			
	1 ft	2 ft	5 ft	10 ft
Pond Surface Area	Gallons of Water			
30'x30' (900 sqft, 1/50 acre)	6,732	13,465	33,662	67,324
50'x50' (Roughly 1/16 acre)	18,701	37,402	93,506	187,011
1/8 acre	40,731	81,462	203,655	407,310
1/4 acre	81,462	162,924	407,310	-
1/2 acre (~1/2 football field)	162,924	325,848	-	-
1 acre	325,848	-	-	-

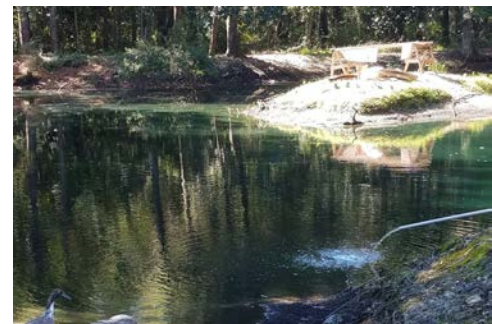
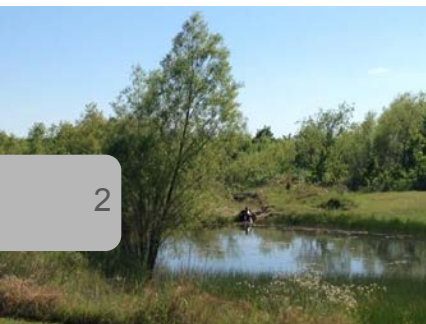
Keeping up with Evaporation

In order to maintain a steady water level in the absence of rain, water must be added at the same rate as evaporation. Solar pumps are generally perfect for filling ponds as the sunniest days when evaporation is greatest are generally the days when you'll get the most hours of solar pumping.

Evaporation rates are also affected by:

- Air Temperature
- Water Temp
- Surface Area
- Humidity
- Wind

Pond Surface Area	Gallons of Evaporation Per Day		
	Low Range	Avg. Range	Extreme Range
1/50 acre (Roughly 30' x 30')	68	136	272
1/16 acre (Roughly 50' x 50')	204	407	815
1/8 acre	424	849	1,697
1/4 acre	849	1,697	3,394
1/2 acre (~1/2 football field)	1,697	3,394	6,789
1 acre	3,394	6,789	13,577

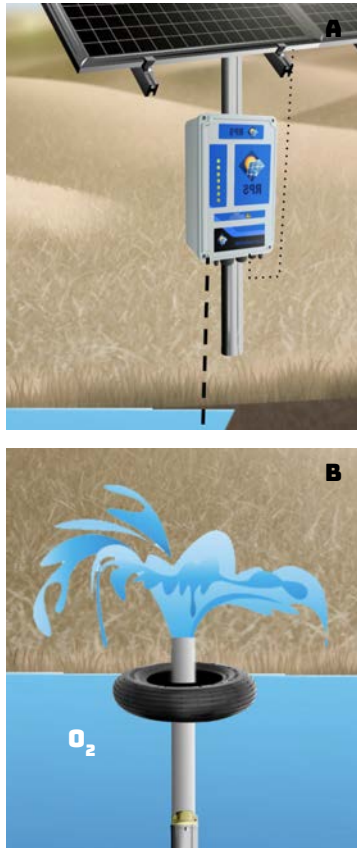


FILL / AERATION

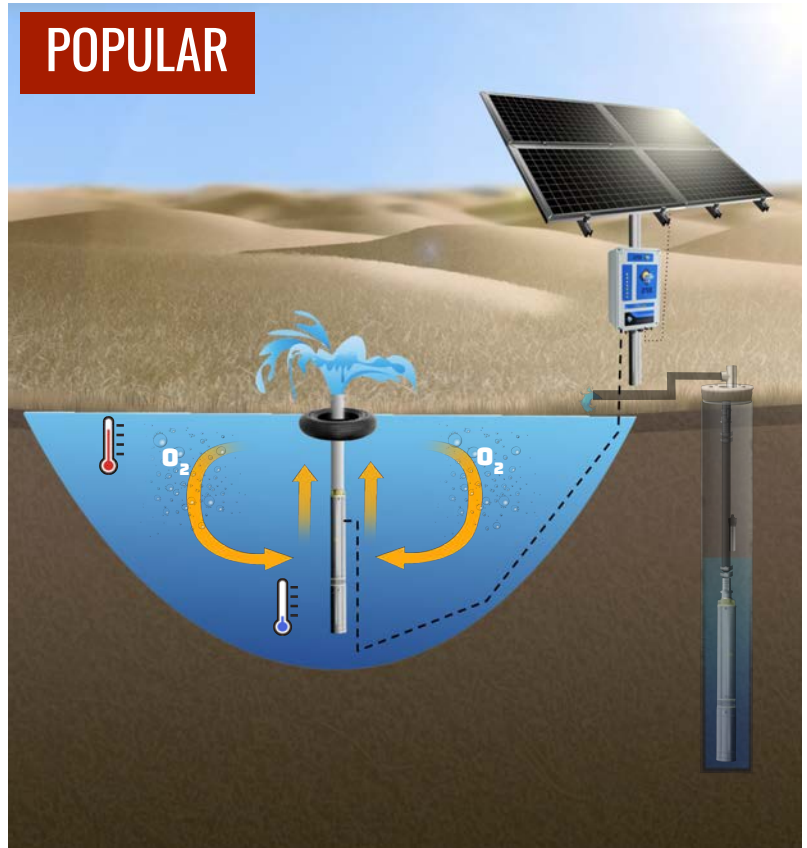
Filling Pond from Well or Aerating Pond Pump

Filling a pond with a well pump is a popular and fairly simple install. Plumb the well pump to discharge into the pond being careful to have the pipe outlet above the water level to prevent siphon. You can also pump from a river or spring to a pond with a solar well pump or surface pump.

The second pump in the center of the diagram illustrates a simple install to create a fountain for aeration. This action of drawing water from the bottom of the pond creates a nice upswell to circulate the water in the pond (B). We recommend using centrifugal pumps for these applications as they are designed to move large volumes of water meaning fuller ponds, less algae and more healthy wildlife.



POPULAR



SIZING A SOLAR PUMP TO FILL YOUR POND

We have solar pump options that range from 5 GPM, like an RPS 400, all the way up to 200+ gallons per minute, a Pro5000V. You may need something in the middle! Our pump specialists can help size the system on a brief phone call but we'll need the following info...

1. Static water level in your well
2. Horizontal distance from well to pond, and if there is any uphill climb
3. Surface area of your pond (i.e. 1 acre)
4. Depth of your pond
5. Any additional leakage or evaporation that your pond may experience, try and estimate how many gallons the pond loses per day, week or month

Plumbing or wiring questions? Chat with an engineer at **888-637-4493**

AERATION



NEW RPS AIR200



The **RPS AIR200** is the **first of its kind**, aerating your pond with an **RPS Air Compressor with DC Brushless Motor**, weighted aerator hose, 7" weighted **diffuser membrane air stone** and the assistance of **200W** of power from **2-100W Solar Panels**.

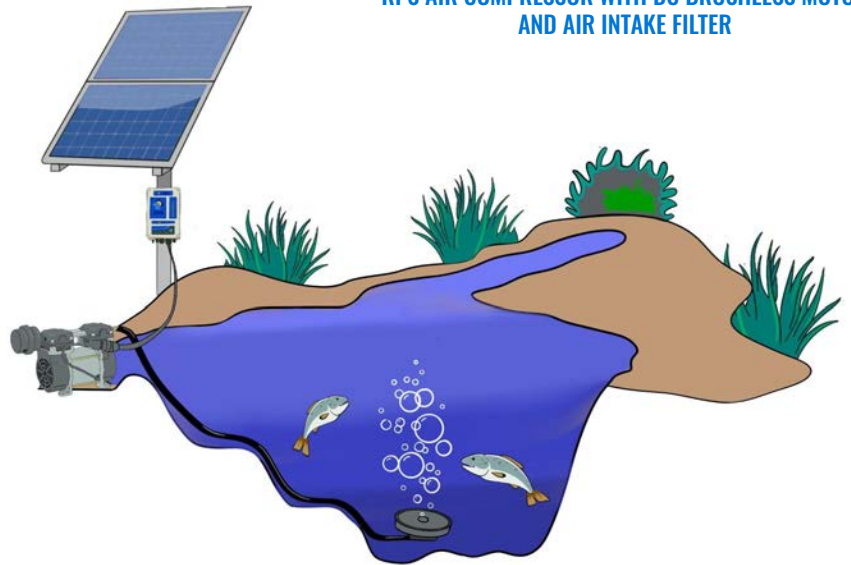
Pond Size:	¼ acre	½ acre	¾ acre	1 acre	1 acre +
# of Units	1	2	2-3	4	Fountain



7" WEIGHTED DIFFUSER MEMBRANE AIR STONE



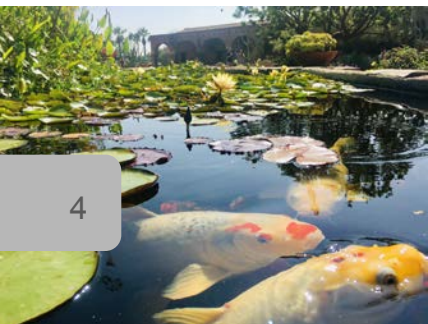
RPS AIR COMPRESSOR WITH DC BRUSHLESS MOTOR AND AIR INTAKE FILTER



RPS' First Aerator

Our RPS engineers spent all year developing a **solar powered air compressor kit** that is now the most unique technology we've found anywhere on the internet to aerate your pond! Easily assembled and installed by one person in a single weekend, lifting no more than 18 lbs at a time. The solar powered air compressor pushes oxygen through a weighted hose down to a bubbling air stone, aerating multiple pond thermoclines with fresh O2. Supported for pond bottoms up to 15 feet deep. For ponds deeper than 15 feet, you can float the air stone at 15 feet and still get great aeration. Air intake muffler makes for **SUPER** quiet compressor operation.

A properly aerated pond can hold twice the amount of fish that a non-aerated pond could hold!



RUNTIME UPGRADE KIT: RPS AIR 400

If you're worried about bad weather interrupting aeration, RPS offers the option of adding **two additional solar panels**. Upgrading from two 100W solar panels to four 100W solar panels will extend hours of performance and improve performance during overcast days. Additional batteries may also be added.

RPS AIR KIT INCLUDES:

- RPS 100 Watt Rugged Aluminum Framed Mono-Crystalline Solar Panels (Dimensions are roughly 3.75' long, 1.6' wide and a little more than 1" thick). 2x100W Air200, 4x100W Air400.
- RPS Air Compressor with DC Brushless Motor and Air Intake Filter
- RPS Universal Controller
- 1/2 inch hose barb
- 20 feet of solar wire
- Air Intake Filter
- Weighted aerator hose
- 7" Weighted Diffuser Membrane Air Stone
- 25 feet of 16 Gauge, 3 Strand pump wire
- Detailed full-color solar pump guide with step-by-step install instructions
- Access to RPS video archives of installation tips & product walkthroughs
- 30 Day Money-Back & 100% Water Assurance Guarantee
Field Serviceable
- 2 Year Comprehensive Warranty
- Phone / Email / Text Support from Friendly USA based RPS Engineers

Solar panel mounting is **not included** in the standard RPS AIR system, you can purchase one of our easy-to-install Top of Pole mounts for a complete DIY experience. The compressor should be protected from the elements with some sort of cover, customer provided.

BATTERY BACKUP

If you're worried about bad weather interrupting aeration, RPS offers the option of adding **additional batteries** to allow for longer run times.

Our engineers and technicians can recommend the right pairing of solar panels and batteries for your specific needs.

NEW RPS AIR200 + BATTERY



The same great RPS AIR Kit, but with batteries for anytime aeration. Depending on desired runtime, our technicians will recommend 2,4 or 6 panels and battery pairings.

SOLAR FOUNTAIN KITS

POPULAR

Healthy ponds need help circulating water to stave off algae growth, feed beneficial microbes, protect against fish kill and most importantly, incorporate dissolved oxygen. Fountain Aeration is *preventative maintenance* when talking about organic material (weeds, muck, algae, etc). If pond health is *really* bad, chemicals may be needed on top of aeration. Oftentimes 400W of aeration per surface acre is adequate, but a dirtier pond or a fish pond should size up to 800W or 1600W per surface acre. You can hang submersible solar pumps near the bottom of a deeper pond for circulation or float the pump just under the surface for venturi or fountain applications. Bubbblers and air compressors were formally the preferred method of aeration, but solar pumps have overtaken the market due to ease of use, cost and longevity.

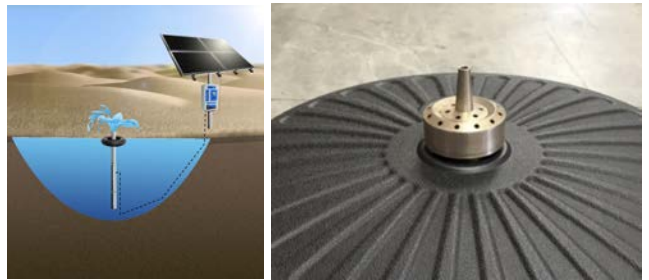
WATCH ON
YOUTUBE



Even a simple aeration system helps to de-stratify the temperature gradients (thermoclines) in the pond (page 18). Hot, oxygen rich water at the top is prevented from mixing with the cold, oxygen depleted water at the bottom by a thermocline. Fish loss from stratification poses a serious problem to pond health, but **a properly aerated pond can hold twice the amount of fish that a non-aerated pond could hold!** If your pond is oddly shaped or multiple acres wide, you may need more than one pump for aeration. In moderate climates without hard freezing, fountains can be used year round though aeration isn't as important in the winter as dissolved oxygen levels are higher. Circulation can maintain a small area of unfrozen pond. Below is a general guide to sizing a solar fountain, call us for a custom sizing based on your pond specs!



	F400	F800 TriPower	F1600 TriPower
Power Input	Solar Only	Solar, 110VAC, 220VAC	Solar, 110VAC, 220VAC
Pond Size	Shallow, Under 1/4 acre	Under 1 acre	Deep or over 1 acre
Kit Includes	400W Solar Array (4x 100w) -20" Black Poly Float & choice of 3/4" Nozzle -RPS 400V Pump Kit -Controller	800W Solar Array (8x 100w) -20" Black Poly Float & choice of 1-1/2" Fountain Nozzle -RPS TriPower Pump -DC Disconnect	1600W Solar Array (16x 100w) -20" Black Poly Float & choice of 1-1/2" Fountain Nozzle -RPS TriPower Pump -DC Disconnect
Cost	\$	\$\$	\$\$\$



Cluster

Blossom

F400

3/4"

3/4"

F800/1600

1-1/2"

1-1/2"

CHOOSE ONE OR ASK FOR BOTH!

Online Reviews: ★★★★★



CUSTOMER STORIES

Mike in TN Makes His Own Paradise

Mike installed an RPS400V Pump into his newly-dug **Tennessee** pond.

"Thank you again for making sure the fountain pump was exactly what I needed and I've got it working. The pond still looks so new, muddy and you can see dirt banks. But by spring I will have fish and plenty of plant life around to make it look like it's been there for 100 years. And again I can't thank you enough. It's not always easy taking an idea and finding the actual parts to make it work.

I make custom knives and I love to make sure the owners get everything they wanted and more. This is the first time I ever got that feeling from anyone I have bought something from. And I have to tell you it's a very good feeling.

Thank you so much not only for an amazing product but for your actual customer service. Thank you and please thank everyone there for me. Absolutely incredible all the way around. Hope everyone enjoys the work."

“ “You guys are the best! I am going to buy another for my buddy's pond! ”
John, TX



“ “We will do this again in the next pond (maybe two of them). Great product! ”
Michael, CA



“ “I bought a fountain pump for my pond a long time ago. Due to unexpected delays on my end, I just got it installed... and it is working absolutely WONDERFUL!!! So, first of all, it's a great product.

However, I'm even more impressed with the customer assistance that I received. They were fantastic! They were professional and patient with this 'non-mechanical' customer. To each one of you...THANK YOU! I will always refer folks to RPS Solar Pumps. My fountain looks so cool!"

Don, VA





WHY POND OWNERS TRUST RPS

Rated ★★★★★ on
Google **facebook.**

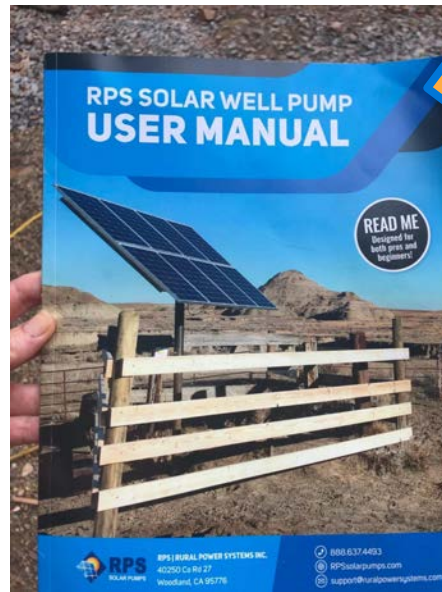
“ The service was fast and friendly. Had my new pond aerator up and running within an hour. Very happy with everything I would definitely use you guys again in the future. ”
Darrell, DE



2 Year Warranty
Year Round Phone + Email + Text Support
Full Color Detailed Manuals



America's #1 Most Trusted Solar-Powered Water Pump
RPS Solar Pump Kits are for people that believe in getting the job done themselves, and getting it done right. Our goal is to arm you with the equipment and knowledge to take control of your water and save a fistful of money doing it.



RPSsoalrpumps.com | 888 – 637– 4493

