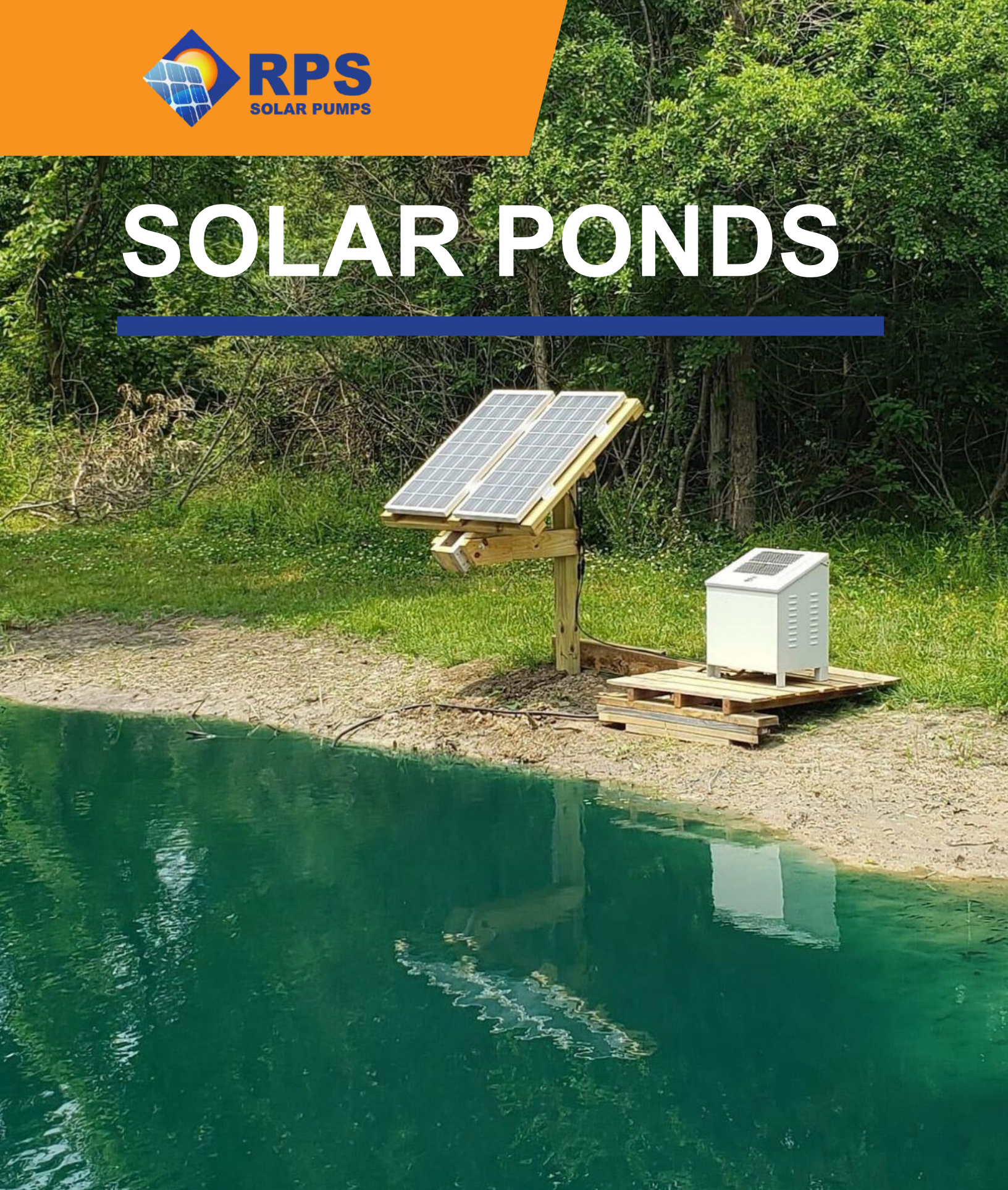




SOLAR PONDS



RPSsolarpumps.com



888-637-4493



support@ruralsolarsystems.com



40250 County Road 27
Woodland, CA 95776

**AMERICA'S #1
SOLAR WELL PUMPS**



RPS
SOLAR PUMPS

PONDS



Estimating Pond Volume

Calculating pond dimensions does not 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 GPD). 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

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 -Surface Area
- Water Temperature -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



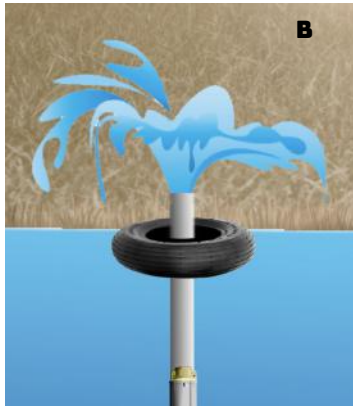
PONDS

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 the discharge into the pond, be 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 (A). 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 with our 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. The horizontal distance from the well to the pond, and if there is any uphill climb
3. The surface area of your pond (i.e. 1 acre)
4. Depth of your pond
5. For any additional leakage or evaporation that your pond may experience, try and estimate how many gallons the pond loses per day, week, or month

Do you have questions about your project? Chat with an engineer at **888-637-4493**

AERATION



NEW RPS AIR1200!



The **RPS AIR1200** is the **first of its kind**, aerating your pond with a **1000W RPS Air Compressor with a DC Brushless Motor**, weighted aerator hoses, 12" weighted **diffuser membrane air stones**, and the assistance of **1200W** of power from **12 -100W Solar Panels**.

RPS' First Aerator

Our RPS engineers spent all year developing **three solar-powered air compressor kits** that are now the most unique technology we have found on the internet to aerate your pond! This pump can easily be assembled and installed by one person in a single weekend. The solar-powered air compressors push oxygen through the weighted hoses down to the bubbling air stones, aerating multiple pond thermoclines with fresh O2. Our pumps are 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. The air intake muffler combined with the weather-proof enclosure makes for **SUPER quiet** compressor operation.

Pond Size:	¼ acre	½ acre	¾ acre	1 acre	1 acre +
Unit	Air200	Air400	Air800	Air800	AIR1200



RPS AIR COMPRESSORS WITH DC BRUSHLESS MOTOR AND AIR INTAKE FILTER

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



AERATION

RUNTIME UPGRADE KIT: RPS AIR 400 & RPS AIR 800

If you are worried about bad weather interrupting aeration, RPS offers two larger systems...

1. 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.

2) Adding **six additional solar panels**.

Upgrading the RPS Air Compressor to a larger motor with additional outlets to connect more weighted hose and Air Stones.

Spray & Bubble 800

If you are not sure whether the Fountain Kit or Aeration Kit will work better for your pond this is a great option to start with.

A great two for one! Not only will you get great looks for your pond with the water fountain but the circulation of air with both fountain and aeration pumps to your pond will create a healthier ecosystem.

RPS AIR KIT INCLUDES:

The RPS Air200 and Air400 Contain

- 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, 8x100w Air800.
- RPS Air Compressor with DC Brushless Motor and Air Intake Filter
- Weatherproof vented metal enclosure to house controller and compressor
- RPS Universal Controller
- 1/2 inch hose barb
- 20 feet of solar wire
- Air Intake Filter
- 50 ft Weighted Aerator Hose $\frac{3}{8}$ inch ID
- 7" Weighted Diffuser Membrane Air Stone
- 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

The Air800 Includes Everything above plus the following

- Additional 50 ft Weighted Aerator Hose $\frac{3}{8}$ inch ID
- Additional 7" Weighted Diffuser Membrane Air Stone

The Air1200 Includes Everything in the Air200/400 plus the following

- Upgraded 12" Mega-Diffuser Disk

Solar panel mounting is **not included** in the standard RPS AIR system, you can purchase one of our easy-to-install Top of Pole Solar Panel Mount Kits for a complete DIY experience.

Spray & Bubble 800



The amazing F400 Fountain Kit + Air400 Air Kit + 8P Mount Kit all in one package to get the best of both worlds for your pond!

SOLAR FOUNTAIN SERIES

NEW RPS F3000



The **RPS F3000** is our all new fountain kit! The kit now comes with our **custom stainless steel nozzles and intake filter**. Also comes with free **100ft of pump wire** and **100ft of safety rope** to make the install as easy as possible for any level DIYer. Powered by **3000W** from **8-370W Solar Panels**.



Pond Size:	¼ acre	½ acre	1 acre	1+ acre	2+ acres
Unit	F400	F800	F1600	F2200	F3000

**NEW
STAINLESS
STEEL
NOZZLES!**



CLUSTER
FOUNTAINHEAD



BLOSSOM
FOUNTAINHEAD



DC Disconnect

Both nozzle styles are included in every kit!

RPS FOUNTAIN SERIES INCLUDES:

All Kits Include

- 100' Safety Rope
- 20" Black Poly Float
- Teflon Tape
- Plumbing fittings from pump to nozzle
- Grounding Clamp
- Custom Intake Filter (4" models only)

The RPS F200/F400 Include

- RPS 400V Pump Kit
- 100' Pump Wire in Box
- 3/4" Nozzles
- Controller
- 100W Solar Panels (2x F200, 4x F400)

The RPS F800/F1600 Include

- RPS TriPower Pump
- 1-1/2" Stainless Steel Nozzles
- DC Disconnect
- 100' Pump Wire Pre-Installed
- 100W Solar Panels (8x F800, 16x F1600)

The RPS F2200/F3000 Include

- RPS TriPower Pump
- 2" Stainless Steel Nozzles
- DC Disconnect
- 100' Pump Wire Pre-Installed
- 370W Solar Panels (6x F2200, 8x F3000)

Solar panel mounting is **not included** in the standard RPS FOUNTAIN system, you can purchase one of our easy-to-install Top of Pole Solar Panel Mount Kits for a complete DIY experience.

SolarFalls™

The World's First Solar Powered Waterfall Maker



Your pond is a sanctuary of wildlife and recreation. Waterfalls and cascading water features circulate tens of thousands of gallons of water per day, meaning a wonderful soundscape and a healthier, more oxygenated ecosystem. From the makers of the award winning Solar Fountain and Aeration systems, SolarFalls™ is the first of its kind - a super high volume solar powered pump designed to handle algae, debris, and leaves, without a power bill. Corrosion resistant cast iron and stainless steel construction for years of reliable flow.

	SolarFalls 500	SolarFalls 3000	SolarFalls 5000
Small Drop Falls	150 GPM	320 GPM	450 GPM
High Drop Falls (20') *		250 GPM	420 GPM

Is your waterfall higher than 20 feet? Call and Ask an RPS Pro
1-888-637-4493



Rated ★★★★★ on
Google **facebook.**





WHY POND OWNERS TRUST RPS

Rated ★★★★★ on
Google **facebook.**

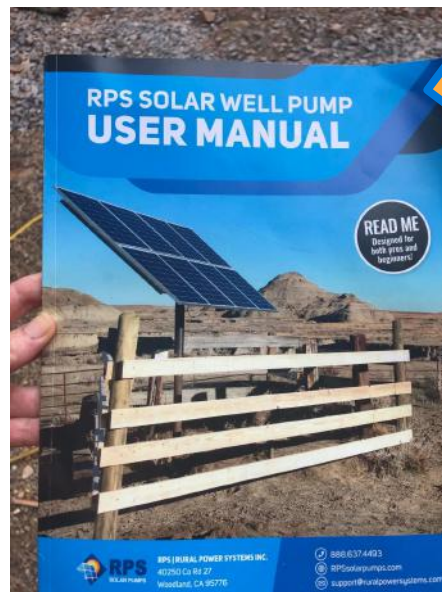
“ The service was fast and friendly. Had my new pond aerator up and running within an hour. Very happy with everything I would definitely use you guys again in the future. ”
Darrell, DE



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 who 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.



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