Well Power Systems

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The Well Power Systems are designed to power underground water pumps, regardless of the time of day. The systems are housed in portable buildings which are included and may be installed on a new well, or added to an existing well. The well and pump are not included. The system is delivered in a portable building ready to connect to the pump.

Energy from solar panels is stored in batteries, which in turn power the inverter and thus the pump. Currently, two types of systems are available, with several models under each type. The solar power will automatically turn off when the batteries need charging, and turn back on when charged. Fully charged batteries will power the pump for a fixed amount of time, regardless of when the power is used, such that a 1 hour system will run the pump for 1 hour, whether over 1 day or 5 days.

System Types

Solar Off-Grid

This system is independent of the grid. It uses solar panels to charge batteries, which in turn power an inverter that powers the pump. Running time on the pump is normally 1 hour/day, delivering 600 gallons of water/day, depending on the number of solar panels and batteries installed. Models with more or less pump running time are available.

Solar + Grid

This system automatically switches to solar power when the grid fails, then back to the grid when power is restored. Running time on solar depends on the number of panels and batteries installed.

4 Panel Well Power System
Model SO600-1

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Solar Off-Grid Models

SO300-1 Runtime/Day Average: 30 minutes Water Pumped/Day Average: 300 gallons/day Panels: 3 x 300 W Batteries: 4 x 12 V dc tractor, 700+ Ampere start current Building Size: 4 ft x 10 ft x 6 ft.	
SO600-1 Runtime/Day Average: 1 hour Water Pumped/Day Average: 600 gallons/day Panels: 4 x 300 W Batteries: 8 x 12 V dc tractor, 700+ Ampere start current Building Size: 4 ft x 10 ft x 6 ft.	
SO1200-1 Runtime/Day Average: 2 hours Water Pumped/Day Average: 1,200 gallons/day Panels: 8 x 300 W Batteries: 12 x 12 V dc tractor, 700+ Ampere start current Building Size: 6 ft x 20 ft x 6 ft.	

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Solar Powered Off-Grid Models

Gerneral Specifications	Solar Off-Grid Systems
Load	Up to ¾ hp submersed water pump using up to 2,500 Watts continuous, 6,500 Watt surge, 220 V ac and 20 to 50 psi pressurized tank.
Solar System	2 to 6 – 285 to 330 Watt solar panels. Each solar panel meets Class 1 Division 2 and shock resistant requirements.
Inverter	4,000 Watt continuous, 7,000 Watt surge capacity. 24 V dc input, 220 V ac output.
Batteries	4 to 12 x 12 V dc diesel tractor batteries with at least 700 ampere start current.
Charger Controller	Located inside the portable structure, charger controller houses, a controller, circuit breakers, terminal strips, microprocessor assembly, and 2 position switch battery switch.
Connection Box	Port for connecting 220 V ac from the inverter to the pump.
Wiring	The wire sizes depend on the current being carried. Sizes up to 03 gauge are used. Wiring is fully connected to each component and tested before shipment.
Country of Origin	USA
System	The Well Power Systems are delivered assembled in portable structures, ready for connection to an existing well.

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Solar + Grid Models

SG300-1 Runtime/Day Average: Pump capacity on grid, 30 minutes on solar Water Pumped/Day Average: Pump capacity on grid, 300 gallons/day on solar Solar Panels: 3 x 300 W Batteries: 4 x 12 V dc tractor, 700+ Ampere start current Building Size: 4 ft x 10 ft x 6 ft.	
SG600-1 Runtime/Day Average: Pump capacity on grid, 1 hour on solar Water Pumped/Day Average: Pump capacity on grid, 600 gallons/day on solar Solar Panels: 4 x 300 W Batteries: 8 x 12 V dc tractor, 700+ Ampere start current Building Size: 4 ft x 10 ft x 6 ft.	
SG1200-1 Runtime/Day Average: Pump capacity on grid, 2 hours on solar Water Pumped/Day Average: Pump capacity on grid, 1,200 gallons/day on solar Solar Panels: 8 x 300 W Batteries: 8 x 12 V dc tractor, 700+ Ampere start current Building Size: 6 ft x 20 ft x 6 ft.	

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Solar + Grid Models

Gerneral Specifications	Solar Off-Grid Systems
Load	Up to ¾ hp submersed water pump using up to 2,500 Watts continuous, 6,500 Watt surge, 220 V ac and 20 to 50 psi pressurized tank.
Transfer	Built-in automatic transfer switch from grid to battery power and back.
Solar System	2 to 6 – 285 to 330 Watt solar panels. Each solar panel meets Class 1 Division 2 and shock resistant requirements.
Inverter	4,000 Watt continuous, 7,000 Watt surge capacity. 24 V dc input, 220 V ac output.
Batteries	4 to 12 x 12 V dc diesel tractor batteries with at least 700 ampere start current.
Charger Controller	Located inside the portable structure, charger controller houses, a controller, circuit breakers, terminal strips, microprocessor assembly, and 2 position switch battery switch.
Connection Box	Port for connecting 220 V ac from the inverter to the pump and from grid to transfer switch.
Wiring	The wire sizes depend on the current being carried. Sizes up to 03 gauge are used. Wiring is fully connected to each component and tested before shipment.
Country of Origin	USA
System	The Well Power Systems are delivered assembled in portable structures, ready for connection to an existing well.

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Shipping for Well Power Systems FOB: Union City, TN 38261 1 portable building on skids, each with roof mounted solar panels, weighing between 700 and 2,500 lbs. plus one pallet for 6 to 12 batteries.	Ship to Address: TBD
Terms Payment on delivery.	
Delivery **Equipment**: 5 to 8 weeks after receipt of purchase order. **Installation Assistance and Alignment**: According to Schedule, up to 6 months after equipment delivery.	
Price Validity until 30 June 2016	
Warranty One year limited warranty on defective parts returned to manufacturer.	

4 Panel Well Power System

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