Solar Pumping Station™ (SPS)

General: The Solar Pumping Station is built into an aluminum ruggedized container with an integrated photovoltaic system, pump controller, batteries, and accessories for a complete and operable pressurized water pumping system to provide off-grid pressurized water service for showers, wash stations, irrigation, etc.

This self-contained, self-powered unit provides a scalable, system-based solution to the provision of clean pressurized water in remote sites and areas requiring easy redeployment. The SPS has flexible power solutions that meet a wide range of project scopes and needs.

Each SPS module provides:

- 1.7 kW solar array
- Integrated pump controller
- Generator input converter box
- Water pressure tank and associated switches and controls
- 15 kWh battery bank
- The array, battery bank, and pump are capable of providing **15-hour daily availability of on-demand pressurized water** with a flow rate of 10 GPM at 40 PSI, even in cloudy weather
- Multiple transport options with internal skid mounts and forklift pockets on all four sides
- Operability in less than 60 minutes after arriving on site
- Scalability – system output can be expanded or reduced by adding or subtracting individual modular units, which can operate parallel to meet a wide variety of demands. Individual units can be taken off-line without interruption of service
- Durability – system is housed in a ruggedized aluminum weatherproof container
- All electrical and mechanical components are marine grade and sealed against the elements
- Batteries are maintenance free AGM/Gel cells and controls are simplified for easy operation and maintenance
- Sustainability and Reliability – using the power of the sun, a readily available fuel source, the SPS is reliable and sustainable. Individual units comprising a larger system can be taken off-line without interruption of service
- Mobility – each unit transports as a self-contained, compact 8x9x15 foot cube that can be deployed quickly using a forklift or sling
- Weight capacity – 2500 lbs. (1134 kg)