



The mission of WorldWater & Solar Technologies is to make clean water and power available everywhere in the world through its proprietary solar technology

- Cost effective
- Quiet & Pollution Free
- Low Maintenance
- Reliable & Efficient

SHEPS™

Solar-Hybrid Expeditionary Power & Purification System

SHEPS™ is a solar hybrid-powered, stand-alone and easy to use water pump, purifier and desalinator, as well as power generator built into rugged, rolling man-portable cases. SHEPS™ features include:

- Portable, built into 2-3 rugged, rolling suitcase sized cases able to be transported in a standard vehicle or as even checked baggage
- Comprised of one container water purification and one container solar and accessories with an additional, optional container providing solar-hybrid charged battery backup and AC/DC power
- Water purifier and optional battery bank can be powered from integrated solar and/or external sources such as generator, wind or vehicle power providing field flexibility and reliability
- Total package comes with four (4) 120w foldable solar arrays and 3 kWh of integrated battery storage providing*:
 - Reverse osmosis water purification producing ~18 gph of drinking water. Operation from solar provides 6 hours of operation, extended operation through solar-hybrid charged battery kit provides 12 hours of run time, and 24 hours of operation is enabled by external power input, or
 - 100 watts of power for 10+ hours; 1500w peak power; 3kW surge enabled, or
 - Combination of water and power output.
- No gasoline, diesel or external power source (other than the sun) required
- AC/DC power available through use of the extended operation battery case
- Easy to set up and use; fully operational in under 30 minutes after arrival onsite
- Environmentally friendly, quiet and pollution-free operation

*Assumes 5 peak-equivalent solar hours; fewer solar hours will result in decreased operating time and output. Auxiliary generator and vehicle power input is built-in to extend operation as needed.



SHEPS™ Water Purifier



Operating in the Philippines with battery storage option



Security, Disaster, Preparedness & Emergency Response



WorldWater’s purification and Reverse Osmosis (RO) desalination processes are state of the art, removing dirt, silt, sand, bacteria, pathogens, cysts, viruses and total dissolved solids. The utilization of RO filtration technologies enables use of SHEPS at virtually any water source to create safe drinking water.

**Reverse Osmosis Filtration & Desalination
4 Stage Process**

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| <ul style="list-style-type: none"> 1) Reusable, polycarbonate coarse debris filter 2) Stainless steel mesh screenfilter 3) Media filter for removing turbidity and reduce particle size to 5 microns or less 4) Desalination membranes to remove bacteria, viruses and dissolved solids such as salts | <p>No chemicals added to water in filtration and purification process</p> <p>Comes with 6-months of consumables, all necessary hoses, pump, fittings and tools. Additional accessories and sustainment packages are available</p> |
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STAND-ALONE SOLAR WATER PURIFICATION & ACCESSORY CASES



CATEGORY	#	UNITS/DESC.	DATA US (METRIC)
EXT. DIMENSIONS:	2	TRANSPORT	32" x 22" x 16" (81x56x40 cm)
EXT. DIMENSIONS:	1	DEPLOYED	10-feet x 10-feet (3 x 3 meters)
WEIGHT WATER PURIFIER KIT:		DRY	70 lbs. (32 Kg)
WEIGHT ACCESSORY CASE:		DRY	70 lbs. (32 Kg)
SOLAR PANELS:	4	FOLDING	120 Watt rugged, flexible high efficiency crystalline solar modules.
CONSTRUCTION:		VARIOUS MATERIALS	Equipment is housed in shock proof, water resistant, ruggedized plastic cases. All water equipment is corrosion resistant plastic or stainless steel.
OPERATING VOLTAGE:			Operates on 24V DC (directly from solar battery or vehicle), NATO plug compatible.
WATER PURIFICATION:	1	OUTPUT	Purifies ~18 gallons/hour (76 liters) of water with TDS <45,000 PPM. Solar alone provides 6 hours of operation, while solar-charged Extended Operation Power kit enables 12 hours of operation. Auxiliary power inputs can enable 24 hour operation.
EXT. DIMENSIONS POWER CASE:	1	TRANSPORT	32" x 22" x 16" (81x56x40 cm)
EXT. DIMENSIONS POWER CASE:	1	DEPLOYED	32" x 22" x 16" (81x56x40 cm)
WEIGHT-POWER CASE:		DRY	145 Lbs. (66kg) - Lithium Ion Phosphate (LFP).
CONSTRUCTION:		VARIOUS MATERIALS	Equipment is housed in shock proof, water resistant and water proof, rugged, rolling plastic case.
BATTERIES:	1	CAPACITY	1.25 kWh of integrated battery storage. DOT certified for transport.
INVERTER:	1	VDC/VAC	21-45 VDC in (solar or vehicle), 120/60Hz VAC in: 120/60Hz VAC out, 500W per outlet pair, 100 Watts sustained power for ~10 hours on 5 hours daily sun, while external power inputs will enable 24-hour operation.
DC OUTPUT:	1		24VDC , 12VDC , 5VDC (USBx2), NATO plug compatible.
CHARGE CONTROLLER:	1		Accepts: Solar - MPPT 30A, AC-120/60Hz, DC-24V NATO plug compatible.

EXTENDED OPERATION & POWER CASE