



Responder[®] S

**Filtration and Ultraviolet Light Disinfection
Portable Solar / 12 volt Powered
Water Purification System for Remote Applications**



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| <ul style="list-style-type: none"> • 1 gallon (3.7 liters) per minute • Built-in Flexibility, 2 Power Sources <ul style="list-style-type: none"> • Solar Charged Battery Powered
100+ gals. (370+ liters) / day • 12-volt Auxiliary Powered Operation
1 gallon (3.7 liters) per minute = 60 gals per hour x 10+ hours = 600 gallons / 2,220 liters • Auxiliary Operational Time: (12-volt) 12+ Hrs Day | <ul style="list-style-type: none"> • Portable: Approx 50 lbs Briefcase Size: 22" long x 18" wide x 10" deep • Rugged / Reliable: Easy to Operate • Easy, 1-minute Set-Up: Instant Production • Battery Status: Digital Display • Battery Charge Storage Life = 1+ Year • Dent Proof Case with Retractable Handel & Wheels • Optional Lamp Out Circuit |
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Cleaner and Safer Drinking Water from most any Creeks, Rivers, Lakes or Fresh Water Sources

Aqua Sun manufactures the **Responder-S Portable, Solar-Battery / 12-volt Powered Water Purification Systems for Remote Applications**. This system has the capabilities of producing **cleaner and safer drinking water** from almost any creek, stream, pond, well, lake or most any fresh water source at a volume production rate of **1 gallon (3.7 liters) per minute** where water purification and electrical power are impractical or unattainable. The daily water production from the solar battery mode is up to **100 gallons (370 liters) per day**. For continuous water purification production a 15 ft long, 12-volt electrical power cord is provided with a cigarette lighter plug and battery jumper cable clips that can be plugged into any car, truck, boat, plane, generator or any 12-volt electrical power supply source. This System does not require any outside electrical power to operate nor is there a need to add chemical additives to the water. Water volume flow rates can be increased by using a specially designed manifold which allows 5 systems to be connected together to increase water volume production amounts to 5 gallons (18 liters) per minute or greater.

These Portable, Solar Battery / 12-volt Powered Water Purification Systems pull the water from the source and through a **Sediment Pre-Filter**. The water is then pushed through a **Carbon Block Polishing Filter** that has the capabilities of removing **Giardia and Cryptosporidium Cysts, Entamoeba and Toxoplasma Cysts, Schistosomiasis, Herbicides, Pesticides, Trihalomethanes (THMs), certain Volatile Organic Chemicals (VOCs), Chlorine and Chlorine By-Products, Sediment, Bad Taste, Odors, Color, Smell, and many other Harmful Chemicals and Contaminants** down to a 0.5 micron. The polished filtered water is then channeled past an **Ultraviolet Light Disinfecting Process** that has the ability to kill **Bacteria, Viruses, Typhoid Fever, Coliform, Dysentery, Cholera, Infectious Jaundice, Hepatitis and Influenza Virus, E-coli, Enteric Fever** and many other unwanted microorganisms to a 99.999% purity.

Life expectancy of the Carbon Block Filter with clean incoming water is 10,000 gallons or 1 year.

The Ultraviolet Light life expectancy under normal usage is 12 to 18 months.

The Responder S / PWP-C system is **22" long x 18" wide x 10" deep** and has an **approximate weight of 50 lbs.**

This System is enclosed in a dent-resistant, molded resin briefcase style design with a Retractable Handel and Sturdy Rolling Wheels for easy traveling.

This system comes in 2 different powered models:

Responder S: combination of solar & battery (provided) and 12-volt auxiliary powered operating capabilities.

Responder A: 12-volt auxiliary powered operation only (solar panel and battery not provided). Purified water volume production rate is 1 gallon (3.7 liters) per minute; up to 720+ gallons (2664+ liters) per day (up to 12+ hours / day).

We can design for your needs.

This System is approved for **air shipments** inside and outside the continental United States.

All water contact components carry a **NSF Approval Rating** and the ultraviolet light carries a **Certificate of Analysis**.

The filter and UV light manufacturers are members of the **Water Quality Association**.

Aqua Sun International is a registered **DEPARTMENT OF DEFENSE CENTRAL CONTRACTOR**, an approved **UNITED NATIONS SUPPLIER**, and a member of the **AMERICAN SOLAR ENERGY SOCIETY (ASES)**.

SEDIMENT FILTER

Removes ground water sediment and protects the carbon block filter from premature clogging. Not washable. **APPROXIMATE FILTER LIFE EXPECTANCY depends on how dirty incoming water is or 1 year maximum.**

0.5 micron CARBON BLOCK with CYSTS AND VOC'S REDUCTION

Removes and reduces giardia lamblia and cryptosporidium cysts, entamoeba and toxoplasma cysts, volatile organic chemicals "VOC's" pesticides and herbicides, turbidity reduction, sediment, color, bad taste and odors such as hydrogen sulfide "rotten egg smell" and many other microorganisms down to a 0.5 micron. This Carbon Block Filter polishes the water crystal clear for refreshing good tasting water. This filter is made entirely from FDA-compliant materials.

APPROXIMATE FILTER LIFE EXPECTANCY 10,000 gallons / 37,000 liters or one year of clean incoming water maximum.

ULTRAVIOLET DISINFECTING LAMP

Clean, safe and natural UV light rays have the ability to kill the bacteria and virus to 99.999 % purity without any harmful side effects much like chemical agents normally added to drinking water. The ultraviolet range is ideal for killing Micro-organisms such as E-coli, Coli form, Cholera, Legionnaires Disease, Hepatitis Virus, Typhoid Fever, Dysentery, Infectious Jaundice, Influenza, Enteric Fever and many other unwanted Microorganisms.

APPROXIMATE UV BULB LIFE EXPECTANCY 8000 hours, or approx 12 – 18 months.

Standard Features:

- **Size:** 22" long x 18" wide x 10" deep @ 50 Lbs.
- **Solar Panel:** Size; 18" long x 11" wide
- **Standard Operating Power:** Solar Electrical Producing Panel, Battery and Controls
- **Output Watts:** Ultraviolet Light only; 10 Watts per hour
- **Self Priming Water Pump:** 1.8 amps max per hour depending on head
- **Weight Empty:** approx. 50 lbs
- **Inlet Connection:** 3/8 "Female Standard Hose / Swivel. 11 feet long
- **Inlet Strainer** with back flow preventer / check valve to keep pumped primed.
- **Outlet Connections:** 3/8 "Male Standard Hose / Threaded. 7 feet long
- **Rated Water Pressure:** 20 PSI minimum / 65 PSI maximum
- **Hoses, electrical cords and all misc. fittings** included with system
- **Ultraviolet Lamp Output:** 16,000 microwatt seconds per centimeter squared and carries a Certificate of Analysis. UV Lamp ON LED Red light indicator.
- **NSF and FDA APPROVED** on filtration and water contact components
- **Filter / UV Replacement Parts** available as kits and individually

Options:

- **U.S. Voltage:** 110 volt. 110 volt to 12 volt Converter for AC Operation.
- **International Voltage:** 220 volt 50 Hz. Uses a 220 volt 50 Hz to a 120 volt Power Step Down Converter.
- **Back Pack:** Black, Light weight commercial grade.
- **Decontamination / Shower Faucet** for wash downs in Emergency Response and Hygiene Shower.
- **Optional, Lamp Out / Pump Disconnect: (LO / PD)** Stops water flow if UV light is not Lit / ON.

Replacement Parts Kit:

Approx. water amount produced with Replacement Parts Kit = 40,000 gallons / 148,000 liters.
Quantity

- 8 - Sediment Filters
- 4 - 0.5 micron Carbon Block Filters
- 1 - Ultraviolet Bulb

Shipping Box Size:

- Without Replacement Parts Kit; 22 x 18 x 12 @ 50 lbs
- With Replacement Parts Kit; 24 x 20 x 18 @ 60 Lbs

**We can ship this system most anywhere in the World.
Individually or Ocean Containers.**

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