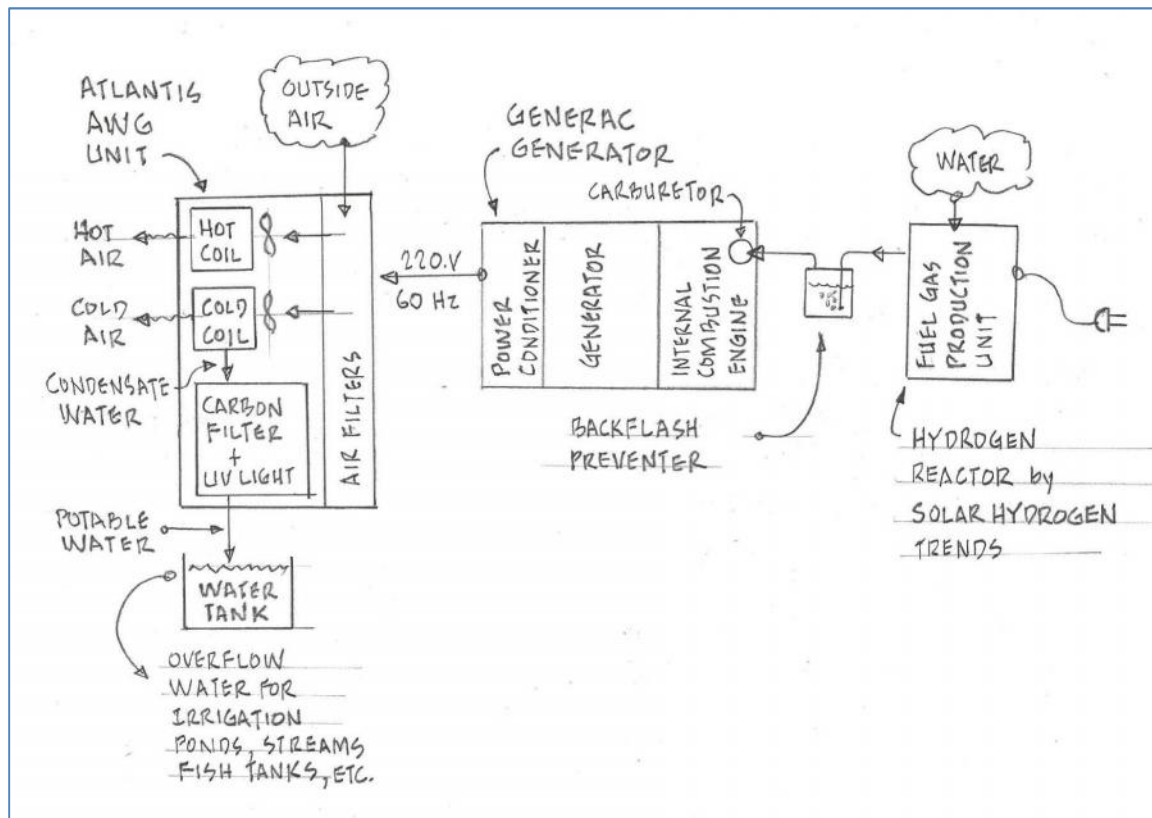


OASIS-3

Here is a definition of all of the components needed to build a prototype device that will produce water from air at a nominal low cost. Our ultimate objective is to build a machine that will run continuously with no need to pay for energy or fuel. This initial device will produce 300 liters per day. The selected components will work, but we may need to change manufacturers before we put everything together. This is not a problem, because all of the main components have several alternative vendors. The main components are as follows:

1. **THE FUEL PRODUCTION UNIT** will take in water and produce a gaseous fuel in the form of HHO gas or H₂ gas. The favorite is the “HYDROGEN REACTOR” which produces H₂ gas. See www.solarhydrogentrends.com . Alternatives are HHO gas production units from several vendors.
2. **THE ELECTRIC POWER GENERATOR** will run on a gaseous fuel. It is readily available from GENERAC and is designed to run on natural gas. Alternatives are generators produced by Onan, Honda, Briggs and Stratton, and many others.
3. **THE AWG UNIT** is powered by item 2 above, and condenses water from the atmosphere, and processes it into potable water. The water available from the atmosphere is unlimited. It is identical to rain.

Here is a simple schematic diagram showing how it all ties together.



For pictures and details of components, please refer to the following pages.

ATLANTIS AWG UNITS

100 L/DAY

http://www.atlantissolar.com/aswea_100.html

Atmospheric Water Generator Model: ASWEA-100L



- Power Supply: 220V/50HZ / 60HZ
- Distribution Power: 2.1KW
- Water Production (Liter/Day): 100L 30°C 80%
- Input Power of Compressor: 2.0KW
- Internal Water tank: 100L
- Working Conditions: 15°C-40°C (40%RH-95%RH)
- Refrigerant: R - 22
- Phase Protection of Compressor: Phase-sequence Protection / Delay Protection / Hi & Low Pressure Protection / Overheat & Overload Protection
- Noise Level: < 75DB
- Dimension (CM): 142*65*105
- Net Weight: 190kg
- Gross Dimension: 152*75*115
- Gross Weight: 220kg

Dimensions are 60"x 30"x 45" Weight is 485 pounds.
Using 3 units, we can produce 300 liters per day, requiring a generator producing $3 \times 2.1 = 6.3$ kW.

GENERAC GENERATOR

PORTABLE VERSION

<http://gens.lccdn.com/generacorporate/media/library/content/all-products/portable-recreational-power/xg%20series/0196480-b-xg8000e.pdf?ext=.pdf>


Features

- **Generac OHVI® engine** incorporates full pressure lubrication with automotive style spin on oil filter for longer life engine.
- **Powerbar™** easily monitors power wattage.
- **Illuminated LED control panel** for improved visibility.
- **Hour meter** with maintenance resets tracks usage and monitors maintenance cycles.
- **Large-capacity steel fuel tank** with incorporated fuel gauge provides durability and extended run times.
- **Low-oil pressure shutdown** automatically safeguards engine from damage.
- **Covered outlets** provide added protection from the environment and adverse working conditions.
- **Full-wrap, heavy-duty, 1 1/4" steel tube cradle** for added durability and strength.
- **Heavy-duty, never flat wheels** for reliable portability.
- **User-friendly design** has conveniently placed engine controls for simple operation and easy start-up.
- **Fold-down, locking handle** for sturdy portability and compact storage.
- **Single touch electric start**, battery included, provides hassle-free start-up.
- **Plug-in battery charger jack** to keep battery charged and ready to go.
- **First oil and maintenance kit included.**

Model 5747-3 696471057473
(EPV19 State)

Model 5847-3 696471058475
(EPVCSA Canada)

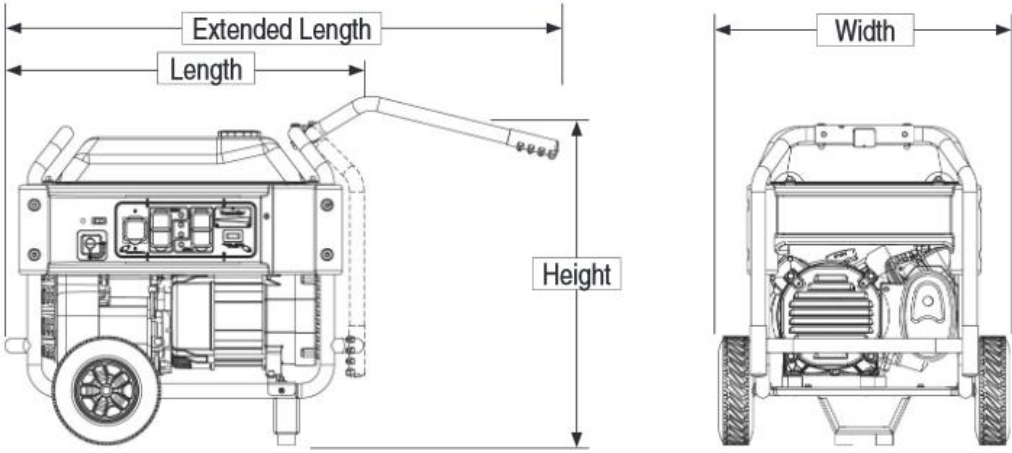
Model 5846-2 696471058463
(EPVCARB California)



AC Rated Output Running Watts 8000
AC Maximum Output Starting Watts 10000

Dimensions and Weights

Length in (mm)	31.5 (800)
Width in (mm)	25.5 (648)
Height in (mm)	28 (711)
Extended Length in (mm)	48.5 (1232)
Carton Length in (mm)	33 (838)
Carton Width in (mm)	26 (660)
Carton Height in (mm)	25 (635)
Unit Weight lbs (kg)	258 (117.3)
Shipping Weight lbs (kg)	263 (119.5)



GENERAC GENERATOR

RESIDENTIAL STANDBY GENERATOR

<http://gens.lccdn.com/generacorporate/media/library/content/all-products/generators/home-generators/guardian-series/0197980sby-guardian-8-11kw-hsb.pdf>

INCLUDES:

- True Power™ Electrical technology
- Two Line (C) Multilingual Digital Evolution™ Controller (English/Spanish/French/Portuguese)
- Two Transfer Switch Options Available: 50 Amp Pre-Wired Switch or 200 Amp Smart Switch. See Page 4 for Details.
- Electronic Governor
- External Main Circuit Breaker, System Status & Maintenance Interval LED Indicators
- Sound Attenuated Enclosure
- Flexible Fuel Line Connector
- Composite Mounting Pad
- Natural Gas or LP Gas Operation
- 5 Year Limited Warranty
- Capability to be installed within 18" (457 mm) of a building*

Standby Power Rating
 Models 006237-0, 006245-0 (Steel - Bisque) - 8 kW 60 Hz
 Models 006437-1, 006438-1, 006439-1 (Steel - Bisque) - 11 kW 60 Hz
 Model 006720-0 (Aluminum - Grey) 11 kW 60 Hz





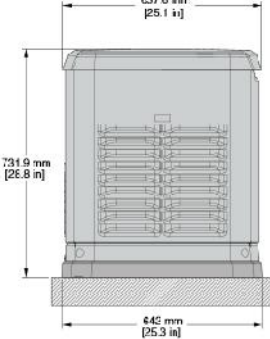

Note: CLL certification on y applies to unbranded units and units packaged with pre-wired switches. Units packaged with the Smart Switch are 11 certified in the USA only.

Guardian 11kW

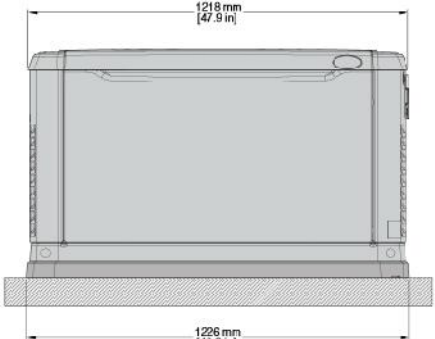
MODEL #6439 / 6720
 STARTING AT
\$2,549.00 MSRP

Natural gas fuel consumption

195 cf/hr = 3.3 cf/min
 195 cf/hr = 5521 L/hr



LEFT SIDE VIEW



FRONT VIEW

Model	UPC
006245-0	696471062458
006237-0	696471062373
006439-0	696471064391
006437-0	696471064377
006438-0	696471064384
006720-0	696471067200

Engine		GENERAC OHVI	GENERAC OHVI V-TWIN
Type of Engine		GENERAC OHVI	GENERAC OHVI V-TWIN
Number of Cylinders		1	2
Displacement		410 cc	530 cc
Cylinder Block		Aluminum w/ Cast Iron Sleeve	Aluminum w/ Cast Iron Sleeve
Valve Arrangement		Overhead Valve	Overhead Valve
Ignition System		Solid-state w/ Magneto	Solid-state w/ Magneto
Governor System		Electronic	Electronic
Compression Ratio		9.5:1	9.5:1
Starter		12 Vdc	12 Vdc
Oil Capacity Including Filter		Approx. 1.5 qt/1.4 L	Approx. 1.7 qt/1.6 L
Operating rpm		3,600	3,600
Fuel Consumption			
Natural Gas	ft ³ /hr (m ³ /hr)		
	1/2 Load	78 (2.21)	124 (3.51)
	Full Load	121 (3.43)	195 (5.52)
Liquid Propane	ft ³ /hr (gal/hr) [l/hr]		
	1/2 Load	31.6 (0.87) [3.29]	42.8 (1.18) [4.45]
	Full Load	51.6 (1.42) [5.37]	70 (1.92) [7.28]

Note: Fuel pipe must be sized for full load. Required fuel pressure to generator fuel inlet at all load ranges - 3.5-7" water column (7-13 mm mercury) for natural gas, 10-12" water column (19-22 mm mercury) for LP gas. For Btu content, multiply ft³/hr x 2500 (LP) or ft³/hr x 1000 (NG). For Megajoule content, multiply m³/hr x 93.15 (LP) or m³/hr x 37.26 (NG).

HHO GAS GENERATOR



<https://www.hytechapps.com/products.html#OnBoard>



Model 1500 Aquygen® Gas Generator

The Model 1500 Aquygen® Gas Generator runs on water and electricity only! It produces a stable hybrid hydrogen-oxygen gas, with many unique properties. The generator provides a superior gas for most conventional brazing, soldering and metal cutting operations.

The Model 1500 Aquygen® Gas Generator is a mid-sized machine, weighing about 160 lbs. with dimensions of 16" x 24" x 26" or about 5.75 cubic feet. It is powered by standard 220v current and can run continuously on 3/4 gallon of water for approximately 8 hours. The unit can operate one standard brazing/soldering station or multiple jeweler torches simultaneously. Additional models designed to generate larger quantities of Aquygen® gas are currently under development and are expected to be introduced in calendar 2009.



Hydrogen Technology Applications, Inc. ♦ 4707 140th Avenue North, Suite 116 ♦ Clearwater, FL 33762 ♦ (727) 531-5979 ♦ Fax: (727) 531-3670

Email: info@hytechapps.com ♦ Website: www.hytechapps.com

THE HYDROGEN REACTOR

NOTE: This unit is the preferred H₂ fuel production unit, however it is not yet available. As soon as we can obtain this device, we will use it to produce our OASIS-4 unit. As we are working as rapidly as possible to build some OASIS units to begin to relieve the impact of the drought, we can make the OASIS-3 work very well using HHO gas.

The following info is taken from the website of SHT
<http://www.solarhydrogentrends.com/#works>



SOLAR HYDROGEN TRENDS INC. Hydrogen Reactor. [100% clean fuel for the planet](#)

Solar Hydrogen Trends Inc. invented a Hydrogen Reactor. The technology provides multifactorial hydrogen reactor with elevated hydrogen production due to a set of sixteen (16) physical and chemical processes, acting simultaneously on the hydrogen bonds. The hydrogen reactor uses water as main fuel and its emissions are 100% clean (clean air).

The technology is non-volatile and produces free flowing hydrogen which can be compressed or used to convert to another form of energy.

The technology can be used as a free standing electrically powered device to produce unlimited amount of hydrogen at world's cheapest rates or as a "bolt-on" hybrid solution.

The hydrogen reactor measures: length: 81 cm x width 36 cm x height 52 cm and weights 114 kg.

Solar Hydrogen Trends Inc. performed two tests of its hydrogen reactor input and output by EPA certified gas testers. The official test certificates with results can be found in the performance results section below.

TRC Solutions, a national engineering services, consulting and construction management firm, performed an electricity input and hydrogen output test, in accordance with EPA certified standards on June 25, 2014.

AirKinetics Inc., a prominent nationwide emissions testing specialist, performed an input and output test, in accordance with EPA certified standards on January 25, 2014.

According to TRC Solutions test, on input of 415 watts, the mini reactor produces an output of 7,369 cubic feet of hydrogen per hour (electricity equivalent of 626 kWh). The estimated cost of inputs is \$1.68 per hour.

According to AirKinetics test, on input of 500 watts, the mini reactor produces an output of 2,797 cubic feet of hydrogen per hour (electricity equivalent of 237 kWh). The estimated cost of inputs is \$1.80 per hour.