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Atmospheric Water Generating Systems

Water Security, Self-Reliance and Independence

Maximus Atmospheric Water Generation ("AWG") systems produce large quantities of fresh potable water with minimal environmental impact, a 20+ year life expectancy and limited maintenance, while also meeting WHO (World Health Organization) standards.

Making water from air and positively impacting the world.

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The Product

The Maximus Atmospheric Water Generation("AWG") systems have the capacity of producing approximately 10,500 liters of water per day. The water is produced where it is needed most minimizing costly transportation, water storage, and water losses. It is the most efficient and environmental AWG system available on the market.

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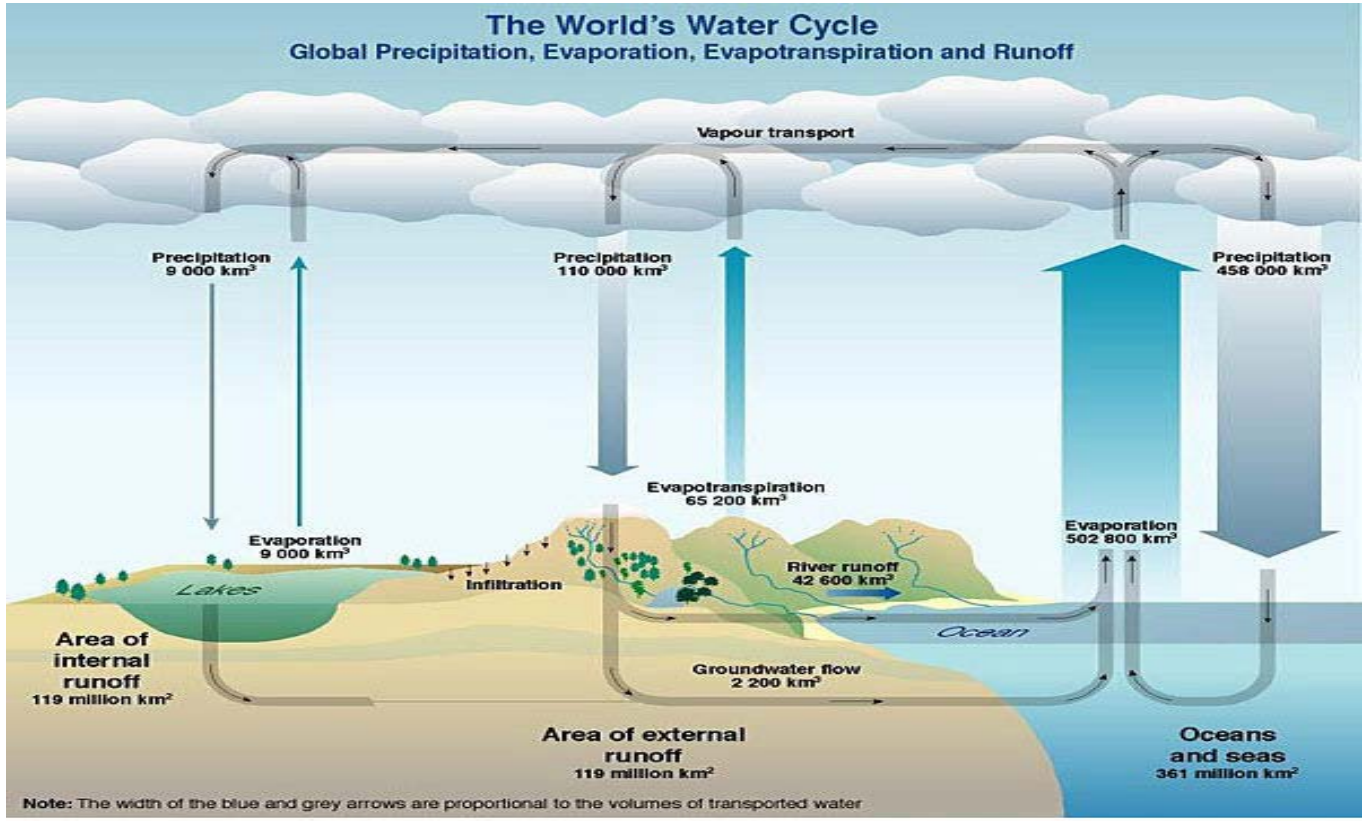
How It Works

The Maximus 4.10 AWG System can be located in a distributed manner, where water is needed most. The Maximus 4.10 is an Atmospheric Water Generation (AWG) system housed in a 40-foot container. It has several powerful fans that draw air into the container and force it over cooling coils, where airborne water vapor is condensed into a liquid.

This water passes through sediment filters, a UV treatment system and carbon filtration into a storage tank. The treated water meets WHO drinking water standards.



Source: Igor A. Shiklomanov, State Hydrological Institute (SHI, St. Petersburg) and United Nations Educational, Scientific and Cultural Organisation (UNESCO, Paris), 1999; Max Planck, Institute for Meteorology, Hamburg. 1994; Freeze, Allen, John, Cherry, *Groundwater*, Prentice-Hall: Engle wood Cliffs NJ, 1979.

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The Technical Details

The Maximus 4.10 system is the most energy efficient in the industry, with a system energy consumption of 0.029 kWh/litre, based on 3rd party engineering testing and verification. No other manufacturer of AWG solutions has 3rd party verification of energy efficiency and water output.

This efficiency is achieved through deploying the most current technology in variable speed components and design.

- A sophisticated electronic controller manages the variable speed fans, variable speed compressors, and multiple sensors.
- All interfaced to monitor operations and machine safety over a wide range of ambient conditions.
- Includes a built-in webserver to interface colour graphics of data and trend information remotely.
- The system integrates the latest in IoT technology.

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Where To Deploy

The Maximus 4.10 is designed to produce 10,500 litres of potable water per day , based on standard test conditions of 27C and 80% relative humidity
As a containerised system it can be transported via truck, rail, ship or air and is ideal for:

- Communities with lack of fresh water or suffer from contaminated ground water including aquifers and wells
- Hospitals and healthcare facilities for primary or emergency back-up fresh water generation
- Commercial and Industrial facilities with mission critical water needs
- Disaster relief with rapid response in case of emergencies and refugee facilities
- Bottling facilities for beverages including bottled water
- Food growing and processing facilities
- Water vending machines
- Military or Government for water security, self-reliance and independence

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Specifications

Description	Specs
Water Production	10,500 liters/day (2,780 gallons/day)
Installed Electrical Power	132 kW
Nominal Environment / Performance Rating Conditions	27C/80% RH (80.6F/80% RH)
Energy consumption	0.3. kWh/liter, (1.1 kWh/gallon)
Size (W x H x L)	2.19m x 2.54m x 11.30m, (86”x 100”x445”) also (7’-2”x8’-4”x37’-1”)
Dry Weight	13,200 kg (29,000 lbs)
Operating Temperature Range	5 to 50 degrees Celsius (42 to 120 degrees Fahrenheit) Ambient Temperatures
Operating Relative Humidity Range	25% to 100% RH
Refrigerant	Environmentally Accepted 410a
Air filters	MERV 15, 95% heavy-duty industrial filters
Machine exterior/interior	insulated painted galvanized sheet metal with stainless steel interior at wet areas
Machine chassis	Structural Steel, Painted
Coil material	Copper and Aluminum
Water Collection Pan Material	Stainless Steel
Refrigeration System	Advanced Modulation Control
Warranty	Industry leading comprehensive two year full parts and labor warranty covers all parts and workmanship

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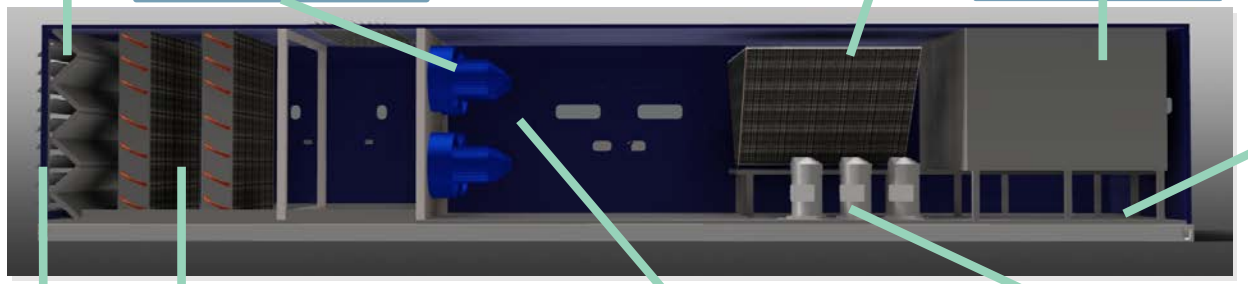
Design & Specifications



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Water Treatment

Water is collected in a UV-protected chamber and stored in a holding tank. Water is filtered and passes through ultraviolet light as follows:

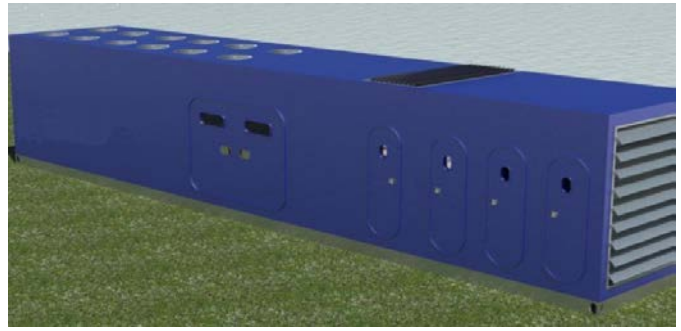
- Water filter 1: Sediment
- Water filter 2: Biological
- Water filter 3: Carbon
- Ultraviolet light (UV)
- Optional Mineralization available

Water Reservoir

- Stainless Steel tank: 2650 liters (700 gallon)
- Supplemental external storage available
- May be connected to customer's external reservoir

Electrical Power and Controls

- 400 V 50 Hz, 3 phase AC
- 480 V 60 Hz, 3 phase AC
- 350 MOP
- 306 MCA
- DDC Programmable Logic Controller: (Proprietary software) human interface with built-in operating trend logging and connectivity for remote monitoring providing for optimal performance at all times



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Modular, expandable ”building block” technology

The Maximus system produces about 30% more water then best existing AWG with same energy use

Approx. 1-acres (1/2 hectares) of land required per 100,000 liter/day capacity

Acre Foot (“AF”)	Gallon(s)	Liter(s)	Cubic Meter
1	325,851	1,233,482	1,233
11.2/year	10,000/day	37,854/day	37.8/day

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OUR MISSION

TERRA's mission is to partner with individuals and organizations to improve quality of life for communities with a focus on conservation and optimal sustainability.

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