

### SOCIÉTÉ DE L'EAU AÉRIENNE SUISSE







# SEAS WATER FOR LIFE

# About Us

SEAS, Société de l'Eau Aérienne Suisse SA, is a Swiss company based in Lugano, with offices in the United States, Mexico, Peru, and the United Arab Emirates.

SEAS is a technology-driven company, with a strong focus on engineering, design, systems, and manufacturing excellence for the construction of machinery and systems in order to produce high-quality drinking water for human consumption; specifically mineralized drinking water, demineralized water for industrial use, and water for agriculture and other common applications.

SEAS's technological expertise is based upon years of university research and development, aimed at the design and construction of an advanced system for industrial-scale water production.

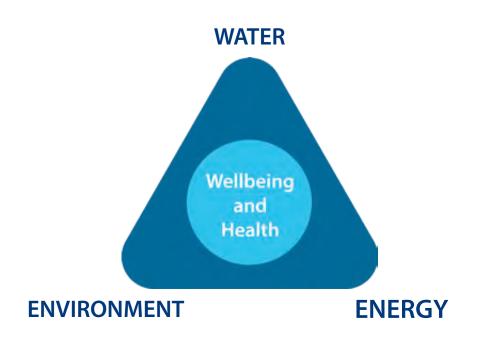
SEAS manufactures integrated systems and machines specifically conceived for water production.

A by-product of the above systems is thermal energy, which can be reused for heating, ventilation, conditioning, and dehumidification purposes.

SEAS systems can be fitted with integrated bottling systems and they has powered by diesel or gas generators as well as alternative energy sources, such as solar energy, wind power, and other renewable energy sources.

SEAS can also offer customised solutions, based on the customer's specific needs and requirements.

SEAS is a Green Company that respects the environment by using very efficient or zero-impact systems.



"We produce clean, healthy water where and when it is most needed"

"Our systems ensure the perfect balance between low energy consumption, water for life, and environmental friendliness"

# SEAS - socially and environmentally responsible

Unlike common water treatment technologies (desalination, water purification, sewage treatment etc.), SEAS water production systems do not return any impurities to the local ecosystems and, therefore, do not pollute water. The extraction of water from air provides an almost unlimited source of clean drinking water without damaging the surrounding environment.

SEAS systems can be powered by generators using solar energy, wind turbines, and other renewable energy sources, further reducing the carbon footprint, i.e. the emission of climate-altering gases into the atmosphere.

The importance of the clean drinking water available in the atmosphere is underestimated, and can never be stressed enough.

SEAS is committed to supporting non-profit organizations in their efforts to deliver drinking water to disadvantaged populations that lack the resources to meet their own daily water needs.



# Market

Market	Needs	Added value with SEAS solutions (systems)
Oil & Gas	System for 'on shore' and 'off shore' production of high-quality drinking water and water for industrial processes.	<ul> <li>Water supply difficulties can be overcome.</li> <li>Independent and reliable source of service water. Easily accessible drinking water. The HVAC system contributes to the production of hot water.</li> <li>Workers will no longer depend on water transportation on trucks.</li> </ul>
Factories / Industries	Production of water for food and drink; industrial washing processes.	<ul> <li>Independent and monitored water supply source with constant and safe characteristics.</li> <li>Easily accessible distilled water.</li> <li>Water costs under control.</li> <li>HVAC and hot water production.</li> </ul>
Hotels, villages, and buildings	Global solution for buildings, hotels, and villages	<ul> <li>High-quality drinking water.</li> <li>Drinking water supply for villages/hotels.</li> <li>Water costs under control.</li> <li>The system contributes to the production of hot water.</li> <li>Cool air is available.</li> <li>Fast return on investments, with a constant and considerable margin for the customer.</li> </ul>

Market	Needs	Added value with SEAS solutions (systems)
Hospitals	Service water (mineral, distilled, sanitary)	<ul> <li>Independent and reliable source of process water.</li> <li>Distilled water.</li> <li>The system contributes to the production of hot water.</li> </ul>
Residential complexes	New / existing ones	<ul> <li>Supply of healthy and safe water.</li> <li>High-quality drinking water.</li> <li>Water costs under control.</li> <li>Energy saving for HVAC production.</li> <li>Production of primary cool air.</li> </ul>
(Community) emergencies	Solutions for rural and isolated communities	<ul> <li>Healthy and safe drinking water.</li> <li>Water available where needed.</li> <li>Possibility to have a mobile unit.</li> <li>Savings in logistic costs.</li> </ul>
Pharmaceutical sector	Distilled and sanitized water solutions for pharmaceutical applications	<ul> <li>Distilled process water.</li> <li>Water costs under control.</li> <li>Top-quality water.</li> <li>Fast &amp; easy management</li> </ul>

# SEAS in the world



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# **Solutions and Products**

The double-pass heat exchange technology and our patented system allow to produce the **35**% more of water than any existing Air-To-Water production system and technology, with the same energy consumption.

At 30°C and 70% humidity, 1 m<sup>3</sup> of air contains 21.9 g of water vapour. Traditional water production systems can condense approximately the 50% of the available water vapour.

SEAS patented technology allows to condense more than the **60**% of the vapour without increasing energy consumption.

SEAS proposes a wide range of solutions and products, including the following systems:

### MOBILE CONTAINER TECHNOLOGY

- Designed and integrated in a container for easy road, railway, sea or air transportation.
- Includes a generator allowing for system operation even in the absence of a power supply.
- Assembled and shipped to the final customer as a complete, fully-integrated system.

### MODULA SYSTEM TECHNOLOGY

- Modular, hybrid, and integrated systems.
- Integrated systems for commercial and residential buildings, capable of producing from 2.5 m<sup>3</sup> to 10 m<sup>3</sup> of water per day, as well as providing thermal energy for heating, conditioning, and dehumidification purposes.
- Industrial solutions, ad-hoc water production, anti-corrosion and cooling systems to be used in hospitals and in the pharmaceutical, oil, gas and mining industries.
- Systems for small communities, islands, and remote locations.
- Water production systems that can be integrated into greenhouses to be used in food, flower & gardening, and agricultural sectors.
- Environment friendly energy solutions, waste treatment, use of renewable energy sources, exhaust gas recovery, for optimized, and cost-effective energy consumption.

SEAS solutions and systems for the production of drinking water are designed in order to allow customers to benefit from a considerable amount of energy to be used for the production of hot water, primary cool air, and cold water. This results in high energy savings that compensate for the cost of the energy required to produce water, and, therefore, in very competitive – or even zero – costs per litre of water.

SEAS can integrate its machine with systems developed on Customer's needs, Customer's geographical location and on the best integration in the existing system configuration. SEAS therefore provides complete solutions in terms of Water, Energy, and Environment.

As for ancillary products, SEAS has in its catalogue the SEAS LDC range, which includes: chillers, heat pumps, dehumidifiers, and a series of air conditioning products.

# SEAS water treatment system



SEAS's modular philosophy has been implemented perfectly in its water treatment system.

SEAS proposes 4 different water treatment system configurations, allowing to obtain many types of water.

Each system is designed so as to be easily adaptable for different needs. Consequently, if the need for a certain type of water changes, the water treatment system can be easily modified even at a later stage.

SEAS also supplies the 'LONG LIFE STORAGE' optimized water collection and storage system. This optional system has been designed and developed to maintain the quality of water production at all times, for example by means of a bioreactor that combines the bactericidal action of ultraviolet radiations with the antibacterial photocatalytic effect of titanium dioxide.

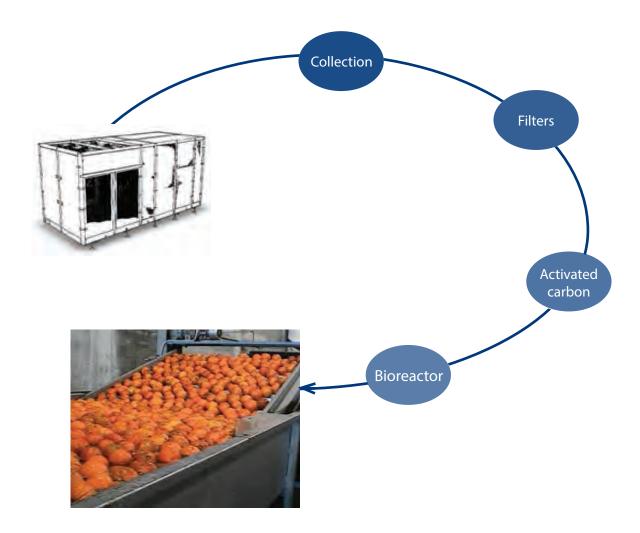
Filtering, sterilisation, mineralization, and real-time monitoring are key features of this technology, whose processes have been carefully studied to achieve high performance, easy and fast maintenance, and constant quality over time.

# **AWA-Basic**

The SEAS system's BASIC configuration allows to obtain sanitized purified water for irrigation, cattle rearing, washing, industrial applications and other purposes.

The system requires not frequent and easy maintenance operations.





# **AWA-Drinking**

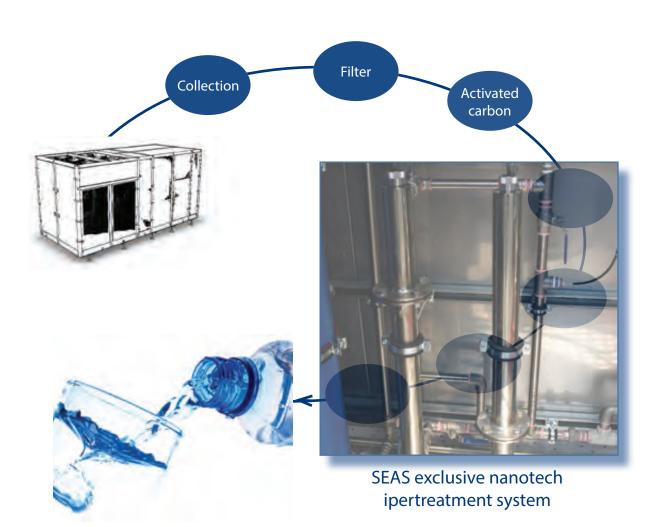
The AWA Drinking configuration allows to obtain high-quality mineralized drinking water comparable to the best bottled water on sale worldwide.

An innovative microbiological sterilisation system, combined with the ultraviolet bactericidal action of titanium dioxide, so high level guarantees a water purification and sanitization that remains at outstanding levels over time.

Thanks to the mineralization, the water has the ideal taste.

The most important parameters are constantly monitored in real time by a sensor system ensuring the water excellent quality over time.



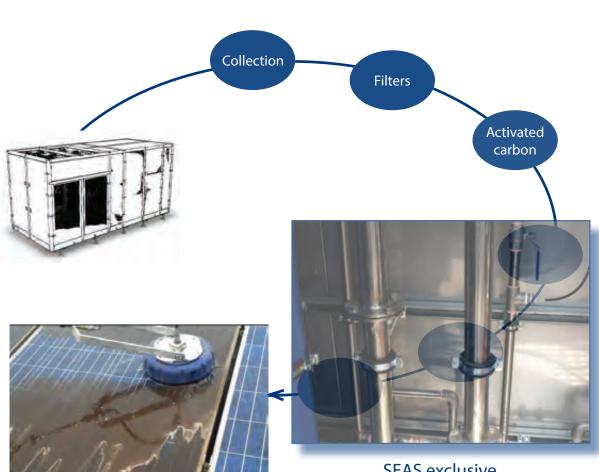


# **AWA-Mineral Free**

The Mineral Free water configuration allows to obtain demineralized water up to  $2M\Omega$ , which suitable for industrial & food applications and accumulators, and distilled water for washing and specific processes.

The demineralization module has been designed in order to obtain a specific water electrical resistance value. Also in this case the system is monitored in real time by dedicated probes.





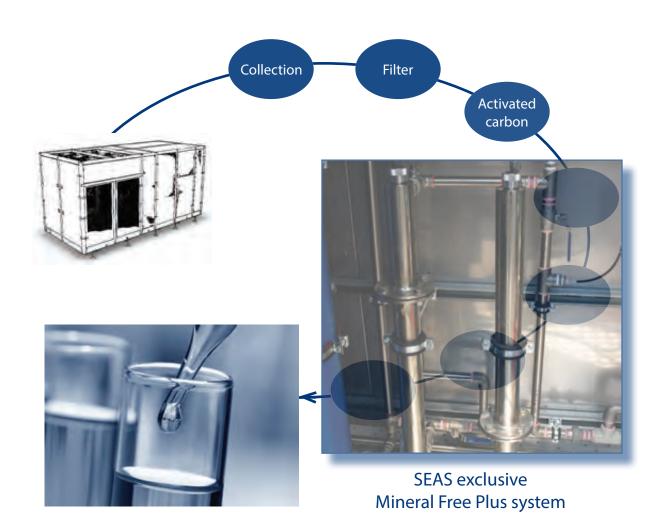
SEAS exclusive Mineral Free system

# **AWA-Mineral Free Plus**

The Mineral Free Plus configuration allows to obtain demineralized water up to  $15M\Omega$ , which suitable for industrial applications and, particularly, food, pharmaceutical, and cosmetic purposes, as well as for accumulators and washing applications .

The demineralization module has been designed in order to obtain a specific water electrical resistance value. Also in this case the system is monitored in real time by dedicated probes.





# Main strengths of the AWA water treatment system



Water characteristics and quality are guaranteed in real time by an efficient sensor system which allows:

- monitoring of chemicals and sanitary water quality;
- on-site and remote control of system operation;
- real-time monitoring of consumable life time;
- recording and storage of error-related alarms.

#### LOW MAINTENANCE FREQUENCY

The AWA water treatment system requires easy maintenance.

The main filters need to be replaced every six months or every 200,000 produced litres.



# SEAS water Long Life Storage system

The SEAS water collection, storage and sanitization system is not simply a tank, but a real additional system allowing to collect water into thermally insulated tank equipped with continuous circulation sanitization devices, in order to maintain water healthiness and quality unchanged for a long time... 'Long Life Storage'.

The SEAS water collection and storage is characterized by a special thermal insulation solution that is capable of reducing the external environment influence on to the water temperature, it is also possible to use the fresh air, generated by the AWA system, in order to keep the stored water at an appropriate temperature.

The water storage system is modular too: each module can contain more than 8 m<sup>3</sup> of water and, if larger amounts of water are required, the system can be expanded by adding more modules in parallel.



LONG LIFE STORAGE PRODUCT RANGE:

S800-LLS 8.000 litres S800-LLS-I 8.000 litres (cooled filling room\*) S800-LLS-E 8.000 litres (conditioned filling room\*\*)

Consisting of two tanks, totaling an overall capacity of 8,000 litres, the SEAS Long Life Storage water storage system maintains the healthiness of the water produced wherever storage is required for specific production needs.

The constantly-circulating water is treated by means of a special bioreactor that combines the bactericidal action of ultraviolet radiations with the antibacterial photocatalytic effect of titanium dioxide.

Conceived to be used independently of the water supply system, this unit can operate in stand-alone mode or can be interfaced with the AWA system, ensuring the storage of any type of drinking water.

<sup>\*</sup> the storage unit can be cooled using the fresh air produced by AWA MODULA

<sup>\*\*</sup> the storage unit can be conditioned by means of a single-block air conditioner

# Water bagging unit



LONG LIFE STORAGE + FILLING SYSTEM PRODUCT RANGE:

F800-LLS 8.000 litres F800-LLS-I 8.000 litres (chilled filling room\*) F800-LLS-E 8.000 litres (chilled filling room\*\*)

The Long Life Storage system can be combined with a water bagging system specifically developed by SEAS for the distribution of the produced water.

The bagging unit supplied uses only single- and double-layer PE films, which ensure the best quality when in contact with food fluids.

In order to guarantee maximum user friendliness and flexibility, the package size and dosage time can be constantly varied from a PLC, from a minimum of 0.2 to a maximum of 1.5 litres.

Moreover, the bagging unit can be equipped with an injection device to inject preservatives, disinfectants or other types of additives needed for the preservation and improvement of the water for distribution.

Similarly, the bagging unit can be fitted with a printer to print production dates, expiry dates, and other information required by the user.

All the systems described above are built in stainless steel, allowing to easily disinfect every single component, and are fully compliant to HACCP requirements for the food industry.

\* the bagging unit can be cooled using the fresh air produced by AWA MODULA

\*\* the bagging unit can be conditioned by means of a single-block air conditioner



BAGGING UNIT Bag capacity from 0.2 to 1.5 l Maximum bagging capacity 10 l/min

In case of additional bottling and distribution needs of the water produced by the AWA systems, SEAS supplies a patented bottling and packaging system for beverages, using both glass and PET bottles.

# SEAS global assistance

SEAS ensures a world-class customised service, supported by a wide range of technical and professional skills that make SEAS a reliable, flexible partner, capable of offering special, dedicated assistance throughout the world.

You can be sure that your water production system will be supported by high skilled professionals.

SEAS can rely on a team of engineers particularly skilled in installation and set in motion start up of the our water production system.





Any assistance required will be provided on site by our technical staff, while any repairs will be carried out at our closest office.

SEAS will directly provide to the replacement of any component.

SEAS can offer personalized diagnostic solutions, as well as a thorough technical assistance for mobile equipment, modular stand-alone units, and any integrated system.

Our customer satisfaction is guaranteed.





A high level of efficiency can only be guaranteed through regular system maintenance and the preservation of the starting system conditions.

SEAS maintenance contract covers a monthly inspection, either by satellite connection or online check; a threemonthly online predictive check on a date to be preventively agreed upon with the customer, aimed at verifying the correct operation of each component and the constant compliance of the produced water with the applicable legal and sanitary requirements; and an inspection by one of our technicians every six months to

verify water quality, including a general system check and the identification of any wornout or critical components. All the carried out activities out will be duly documented.

# Mobile system

SEAS containerized mobile system for water production is fully automated and independent.



The **SEAS** unit is a standard container



## The **SYSTEM** includes **THREE** modules

The first module is an air treatment unit [1-2-3-4] The second module contains the cooling unit [5-6] The third module contains the engine-generator, electronic components, and the water treatment unit [7-7B]

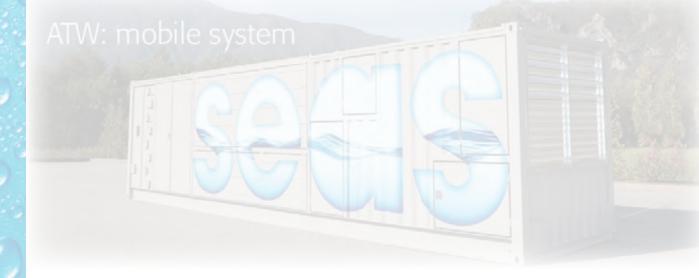
> The filtered air runs through a heat-recovery unit for pre-cooling treatment.

> > Outside air is filtered.

Fresh air leaves the water treatment unit after the vapour extraction. Fresh air can be used for other production applications.



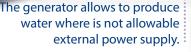
The air water vapour is condensed in a cooling battery, where external air reaches its dew point. The condensed water is collected in a storage basin. The collected water is pumped into an internal integrated water treatment system.





**Control room** ensuring constant monitoring and supervision

The hot air coming from the chiller can be used for other production applications.





The water treatment system filters, sterilizes by means of ultraviolet radiation and finally mineralizes the produced water in order to supply high-quality water.

**100% DRINKING WATER** 

The Chiller unit cools the coolant for the water treatment unit (ATU) by heat exchange with the outside air, and then releases hot air [6].



# AWA MODULA 250

## SEAS Exclusive Property Technology - 2500 l/g









## AWA BASIC



## AWA DRINKING



## AWA MINERAL FREE



AWA MINERAL FREE PLUS



# AWA MODULA

We produce, at the same cost, 4 energy sources at the same time:

- 1 Water
- 2 Primary Air
- 3 Heating
- 4 Cooling



7°C Cold Water Circuit From 25 kW to 100 kW (approx. 17 m<sup>3</sup> with 5° C of temperature difference) Together with the production of water,

managed by the onboard PC.



# COST OF WATER

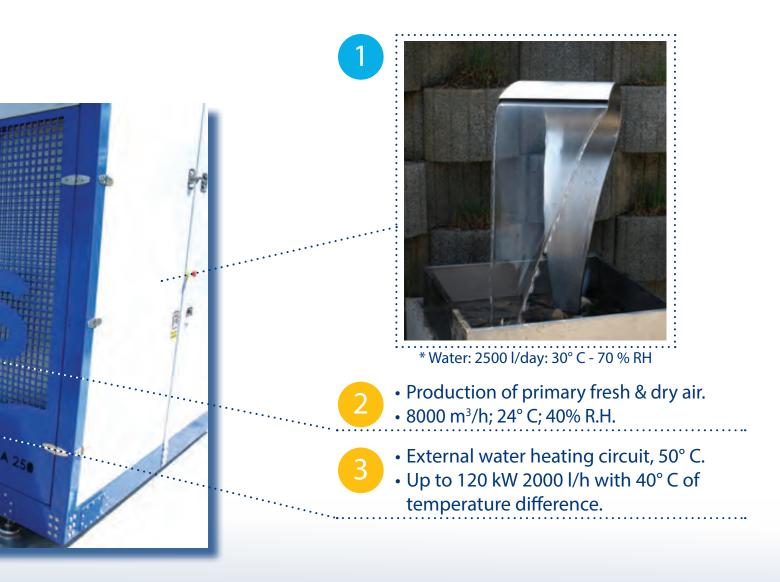
The use of only **30%** of the thermal energy produced during water production allows to produce water at a zero-cost.

# CARBON PRICE

Thanks to the high energy performance, while the AWA system produces water, the thermal energy available considerably reduces CO<sub>2</sub> emissions.

The use of only **30%** of the energy produced by an AWA 1000 reduces  $CO_2$  yearly emissions by over 280 tons, which equals a Carbon Price reduction by more than \$5,500/year (considering \$20 per ton of  $CO_2$ ).







## TECHNOLOGY

- Flexible and modular design
- Available in the W, HWA or HWAC versions
- High-performance components
- Compact frame design
- Galvanized steel frame
- Solid foundation
- Satellite/GSM control
- 5 patent applications filed for AWA MODULA

# AWA MODULA system

The AWA MODULA system produces from 2,500 to 10,000 litres of water per day + primary fresh air + hot water for the heating circuit + cold water that can be modulated in order to guarantee the best integration with HVAC (Heating, Ventilation, Air Conditioning) systems and ensure great ENERGY SAVINGS.

The AWA MODULA system can be easily installed in hotels, resorts and residential buildings, compounds, villas, communities, etc. The use of the AWA MODULA functions ensures great energy savings, that allows to achieve the water production for free.



### AWA RANGE:

AWA MODULA 250 - 2.500 litres per day AWA MODULA 500 - 5.000 litres per day AWA MODULA 750 - 7.500 litres per day AWA MODULA 1000 - 10.000 litres per day

The AWA MODULA systems are built on a standard industrial modular basis. They are easy and fast to build and guarantee a better energy efficiency. The basic Modula system produces 2,500 litres of water per day.

The AWA range is also available in the modular models capable of producing 5,000, 7,500 or 10,000 litres of water per day.

The basic model is the AWA MODULA 250, which produces 2,500 litres of water per day.

The AWA MODULA system is much more than a simple system for the water from air production; indeed, besides water in the basic model of the system – called 'W', with this system is possible to have, in the HWA configuration:

- 1. Hot water (50° C)
- 2. Primary fresh air (24° C 40% R.H.)

in the HWAC configuration:

- 1. Hot water (50° C)
- 2. Primary fresh air (24° C 40% R.H.)
- 3. Cold water (7° C)

The AWA MODULA model comes in the following operation range: Operating temperature and humidity: 5° C 90% R.H. / 50° C 10% R.H.

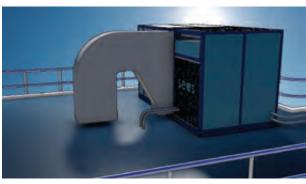
It is possible to develop special solutions on demand with operation range below 5° C. Those Solutions will be valuated on the basis of environment conditions and application requirements.

All these solutions are available on demand in the AWA MODULA range and are suitable for air conditioning systems, greenhouses, high-integration buildings, and industrial applications.

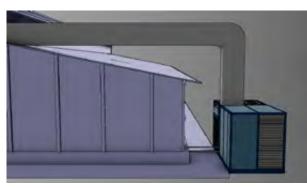
# Focus on energy efficiency

High-efficiency integrated system for the production of water and thermal energy for buildings:

- From 2,500 to 10,000 litres of water per day. Top-quality drinking water available all year round.
- From 8,000 m<sup>3</sup>/h to 32,000 m<sup>3</sup>/h fresh and dry primary air for the HVAC system (Heating, Ventilation, Water and Air Conditioning).
- From 2,000 to 8,000 l/h of process water at 50° C with a 40° C of temperature difference the heating of rooms and the production of hot sanitary water.



Roof-installed AWA MODULA system



Greenhouse-installed AWA MODULA system

Integrated system for the production of water and thermal energy for greenhouses:

- Mineralized or distilled water available all year round.
- Energy for cooling purposes during the hot season, supplied as fresh air or cold process water.
- Energy for heating purposes during the cold season, supplied as hot process water.

## Cold water

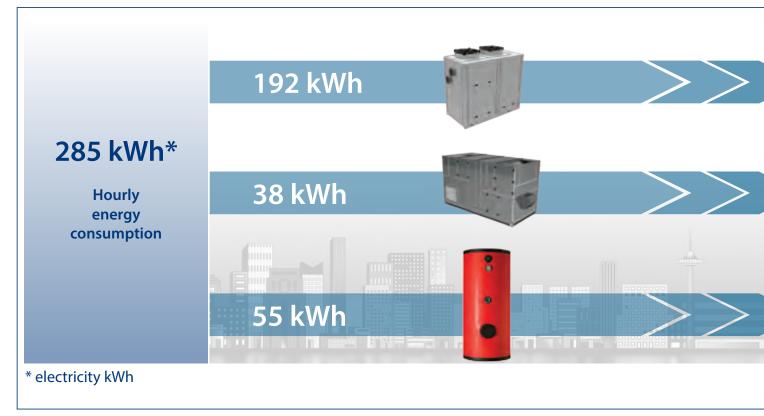
- The AWA MODULA range can supply from 25 kW to 400 kW of cold water.
- At nominal conditions (30° C and 70%), the water has a temperature of 7° C.
- If the availability of cold water is a priority over water production, our automation/field technology system allows to maintain water at the temperature specified above.
- The system also includes two external connectors for quick connection to the various systems (underfloor and ceiling heating systems, greenhouses, homes, etc.).

## Hot water

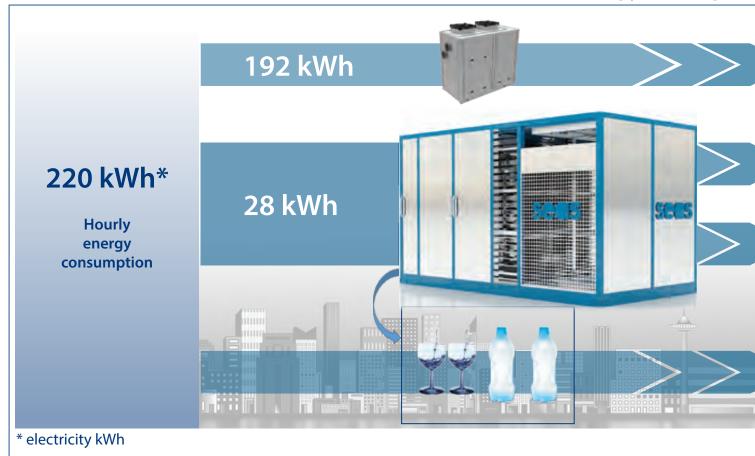
- AWA MODULA is fitted with an ancillary water circuit.
- At nominal conditions, it is possible to recover thermal energy from 120 kW to 480 kW and to obtain water at 50° C with a 40° C of temperature difference.
- In this case, the available thermal energy can be divided into different external applications, such as water for heating purposes, sanitary applications, swimming pools, etc.

## SEAS – Buildin

## 2,500 litres/day of drinking wate



Energy saving -

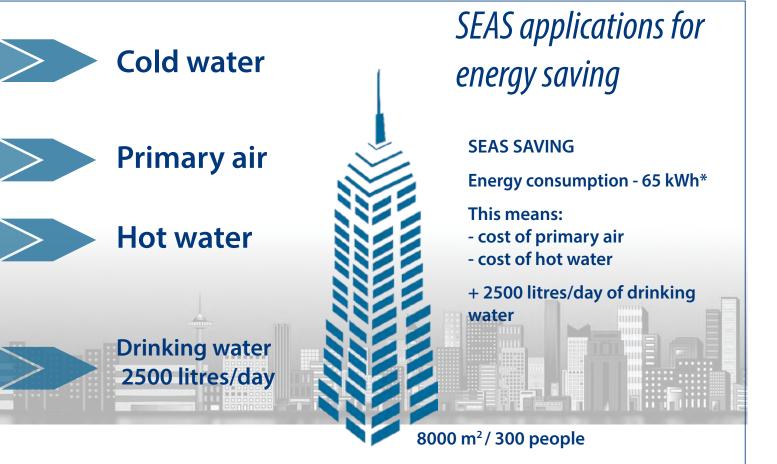


# g applications

## r + HVAC, with an energy saving of 25%



## 25% / <mark>65 kWh</mark>



# AWA MODULA - Unit range



## 2500 litres/day



## 5000 litres/day



## 7500 litres/day



## 10000 litres/day

## > 10000 l/g:

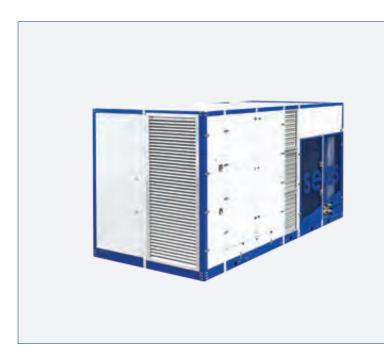


# System Custom Configuration

Nominal environment conditions 30° C 70% R.H. The materials coming in contact with water are certified for contact with food.

# TECHNICAL SHEETS

## AWA MODULA 250-W-X



Water production – 2,500 litres/day.



#### **CHARACTERISTICS**

#### AWA MODULA 250-W-X

2,500 litres/day
60 kW (54 kW + 10%)
30° C & 70% R.H.
0.28 kWh/litre
Environment friendly - R134a
75 dBA (at a distance of 10 m)
4950 x 2230 x 2470 mm
5000 kg
from 5° C / 90% R.H. to 50° C/10% R.H.

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

## AWA MODULA 250-HWA-X



Water production – 2,500 litres/ day, with a considerable energy contribution for hot water and cool/dry primary air.



**AWA MODULA 250-HWA-X** 

#### **CHARACTERISTICS**

Nominal water production	2,500 litres/day
Installed electrical power	60 kW (54 kW + 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	75 dBA (at a distance of 10 m)
Size (W x D x H)	4950 x 2230 x 2470 mm
Weight	5500 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.
Available heating thermal power (Water)	120 kW – 2,000 litres/hour 50° C

Available cooling thermal power (Air)

120 kW – 2,000 litres/hour 50° C 100 kW – 8,000 m<sup>3</sup>/hour at 24° C 40% R.H.

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

## AWA MODULA 250-HWAC-X



Water production – 2,500 litres/ day, with a considerable energy contribution for hot water, primary air, and cold water.



#### CHARACTERISTICS

#### AWA MODULA 250-HWAC-X

Nominal water production	2,500 litres/day
Installed electrical power	60 kW (54 kW <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	75 dBA (at a distance of 10 m)
Size (W x D x H)	4950 x 2230 x 2470 mm
Weight	5800 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.
Available heating thermal power (Water)	120 kW – 2,000 litres/hour 50° C
Available cooling thermal power (Air)	100 kW – 8,000 m³/hour at 24° C 40% R.H.
Available cooling thermal power (Water)	From 25 to 100 kW*

Power supply
400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

\* depending on the water production requirement

## AWA MODULA 500-W-X



#### CHARACTERISTICS

Nominal water production	5000 litres/day
Installed electrical power	120 kW (110 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	78 dBA (at a distance of 10 m)
Size (W x D x H)	7300 x 2230 x 2470 mm
Weight	8500 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.

AWA MODULA 500-W-X

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

## AWA MODULA 500-HWA-X



Water production – 5,000 litres/ day, with a considerable energy contribution for hot water and cool/dry primary air.



#### **CHARACTERISTICS**

#### AWA MODULA 500-HWA-X

Nominal water production	5000 litres/day
Installed electrical power	120 kW (110 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	78 dBA (at a distance of 10 m)
Size (W x D x H)	7300 x 2230 x 2470 mm
Weight	8500 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.

Available heating thermal power (Water)	240 kW – 4000 litres/hour 50° C	
Available cooling thermal power (Air)	200 kW – 16000 m³/hour at 24° C 40% R.H.	

400 V + 100/ / 2Dh + Crownd / 50 H=
400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
-

Other versions available on demand

## AWA MODULA 500-HWAC-X



Water production – 5,000 litres/ day, with a considerable energy contribution for hot water, primary air, and cold water.



**AWA MODULA 500-HWAC-X** 

#### CHARACTERISTICS

5000 litres/day
120 kW (110 <u>+</u> 10%)
30° C & 70% R.H.
0.28 kWh/litre
Environment friendly - R134a
78 dBA (at a distance of 10 m)
7300 x 2230 x 2470 mm
8500 kg
from 5° C / 90% R.H. to 50° C/10% R.H.

Available heating thermal power (Water) Available cooling thermal power (Air) Available cooling thermal power (Water) 240 kW – 4000 litres/hour 50° C

200 kW - 16000 m<sup>3</sup>/hour at 24° C 40% R.H.

From 25 to 200 kW\*

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

\* depending on the water production requirement

The materials coming in contact with water are certified for contact with food.

## AWA MODULA 750-W-X



Water production – 7,500 litres/day



#### **CHARACTERISTICS**

#### AWA MODULA 750-W-X

ominal water production	7500 litres/day
nstalled electrical power	185 kW (170 <u>+</u> 10%)
ominal environment conditions	30° C & 70% R.H.
nergy consumption	0.28 kWh/litre
ooling circuit coolant	Environment friendly - R134a
ound pressure level	79 dBA (at a distance of 10 m)
ize (W x D x H)	11700 x 2230 x 2470 mm
/eight	12000 kg
perating range	from 5° C / 90% R.H. to 50° C/10% R.H.
perating range	101115 C7 907011.11

Power supply
400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

### AWA MODULA 750-HWA-X



Water production – 7,500 litres/ day, with a considerable energy contribution for hot water and cool/dry primary air.



**AWA MODULA 750-HWA-X** 

#### CHARACTERISTICS

Nominal water production	7500 litres/day
Installed electrical power	185 kW (170 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	79 dBA (at a distance of 10 m)
Size (W x D x H)	11700 x 2230 x 2470 mm
Weight	12000 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.

Available heating thermal power (Water) Available cooling thermal power (Air) 360 kW – 6000 litres/hour 50° C 300 kW – 24000 m<sup>3</sup>/hour at 24° C 40% R.H.

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

The materials coming in contact with water are certified for contact with food.

## AWA MODULA 750-HWAC-X



Water production – 7,500 litres/ day, with a considerable energy contribution for hot water, primary air, and cold water.



#### **CHARACTERISTICS**

### AWA MODULA 750-HWAC-X

Nominal water production	7500 litres/day
Installed electrical power	185 kW (170 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	79 dBA (at a distance of 10 m)
Size (W x D x H)	11700 x 2230 x 2470 mm
Weight	12000 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.
Available heating thermal power (Water)	360 kW – 6000 litres/hour 50° C
Available cooling thermal power (Air)	300 kW – 24000 m³/hour at 24° C 40% R.H.
Available cooling thermal power (Water)	From 25 to 300 kW *

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

\* depending on the water production requirement

### AWA MODULA 1000-W-X



### CHARACTERISTICS

Nominal water production	10000 litres/day
Installed electrical power	220 kW (200 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	80 dBA (at a distance of 10 m)
Size (W x D x H)	13150 x 2230 x 2470 mm
Weight	16300 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.

AWA MODULA 1000-W-X

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

## AWA MODULA 1000-HWA-X



Water production – 10,000 litres/ day, with a considerable energy contribution for hot water and cool/dry primary air.



#### CHARACTERISTICS

#### AWA MODULA 1000-HWA-X

Nominal water production	10000 litres/day
Installed electrical power	220 kW (200 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly
Sound pressure level	80 dBA (at a distance of 10 m)
Size (W x D x H)	13150 x 2230 x 2470 mm
Weight	16300 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.

Available heating thermal power (Water)	480 kW – 8000 litres/hour 50° C
Available cooling thermal power (Air)	400 kW – 32000 m³/hour at 24° C 40% R.H.

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

### AWA MODULA 1000-HWAC-X



Water production – 10,000 litres/ day, with a considerable energy contribution for hot water, primary air, and cold water.



AWA MODULA 1000-HWAC-X

#### CHARACTERISTICS

Nominal water production	10000 litres/day
Installed electrical power	220 kW (200 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.28 kWh/litre
Cooling circuit coolant	Environment friendly - R134a
Sound pressure level	80 dBA (at a distance of 10 m)
Size (W x D x H)	13150 x 2230 x 2470 mm
Weight	16300 kg
Operating range	from 5° C / 90% R.H. to 50° C/10% R.H.

Available heating thermal power (Water)48Available cooling thermal power (Air)400 kWAvailable cooling thermal power (Water)400 kW

480 kW – 8000 litres/hour 50° C

400 kW – 32000 m³/hour at 24° C 40% R.H.

From 25 to 400 kW\*

X (Model)	Power supply
S version	400 V <u>+</u> 10% / 3Ph + Ground / 50 Hz
A version	460 V <u>+</u> 10% / 3Ph + Ground / 60 Hz
L version	220 V <u>+</u> 10% / 3Ph + Ground / 60 Hz

Other versions available on demand

\* depending on the water production requirement

The materials coming in contact with water are certified for contact with food.

# MOBILE SYSTEM - ATWG 10 CG



### CE

#### CHARACTERISTICS

### **MOBILE SYSTEM - ATWG 10 CG**

Nominal water production	10000 litres/day
Installed electrical power	180 kW (160 <u>+</u> 10%)
Nominal environment conditions	30° C & 70% R.H.
Energy consumption	0.36 kWh/litre
Electrical connection	Network 400V - 50 Hz
	Diesel generator
Sound pressure level	86 dBA (at a distance of 10 m) from the diesel generator
Size (W x D x H)	12192 x 2348 x 2896 mm*
Weight	18300 kg

	Temperature Limit	RH Limit
Operating range	15° C - 45° C	60% R.H 40% R.H.

\* 40' container

### MOBILE SYSTEM - ATWG 10 C



### CHARACTERISTICS

**MOBILE SYSTEM - ATWG 10 C** 

60% R.H. - 40% R.H.

10000 litre	s/day						
180 kW (160	<u>+</u> 10%)						
30° C & 709	% R.H.						
0.36 kWh/litre							
Network 400V - 50 Hz							
80 dBA (at a distance of 10 m)							
12192 x 2348 x	2896 mm*						
18300	٨g						
Temperature Limit	RH Limit						
	Network 400 80 dBA (at a dista 12192 x 2348 x 18300 l						

Operating range 15° C - 45° C

\* 40' container

## LONG LIFE STORAGE S800-LLS-XY



Long-term water storage system



#### CHARACTERISTICS

### LONG LIFE STORAGE S800-LLS-X

Water storage nominal capacity	8000 litres
Installed electrical power	2 kW
Hydraulic connections	3/4"
Size (W x D x H)	4950 x 2230 x 2470 mm
Weight	2600 kg

X (Model)	Power supply
S version	220V <u>+</u> 10% / 1 Ph + Ground / 50 Hz
L version	220V <u>+</u> 10% / 1 Ph + Ground / 60 Hz

Y (Model)	Conditioning
l version	Cooled by AWA MODULA
E version	Conditioned by single-block conditioner

## LONG LIFE STORAGE+FILLING SYSTEM F800-LLS-X



Long-term water storage system with water bagging unit.



CHARACTERISTICS	LONG LIFE STORAGE+FILLING SYSTEM F800-LLS-X
Water storage nominal capacity	8000 litres
Installed electrical power	6 kW
Hydraulic connections	3/4"
Size (W x D x H)	4950 x 2230 x 2470 mm
Weight	2800 kg
Bag height	Max. 280 mm
Bag width	Max. 165 mm
Maximum single-seal film reel width	390 mm
Maximum compressed air consumption	170 Nl/min 6 bar
Bag capacity	From 0.2 to 1.5 l
Maximum bagging capacity	10 l/min
X (Model)	Conditioning

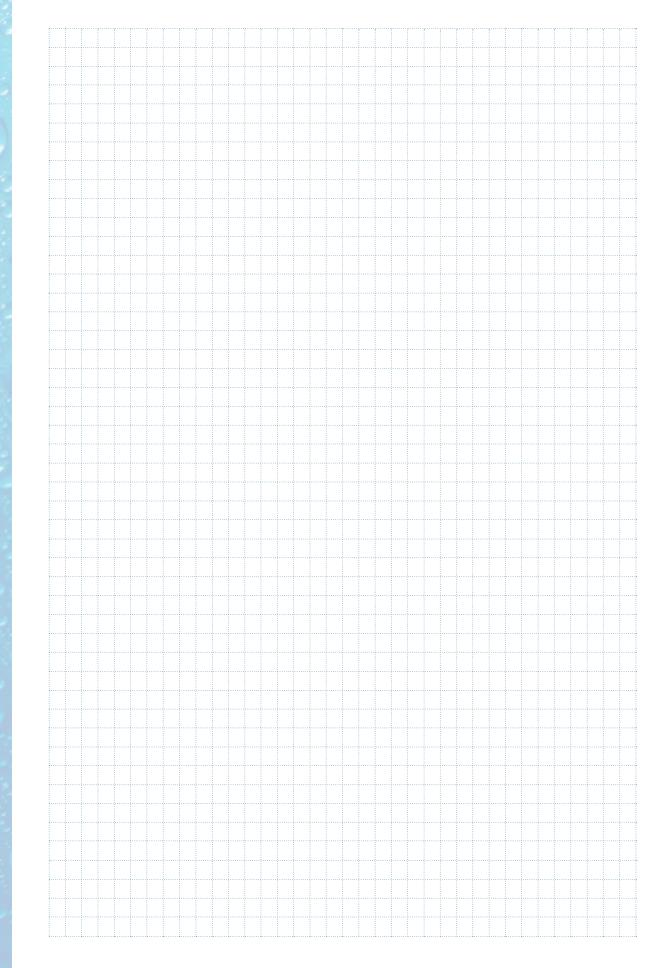
X (Model)	Conditioning
l version	Cooled by AWA MODULA
E version	Conditioned by single-block conditioner









#### A15-CTG/3/EN



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