

Drupps Concept series

Next Generation in Water from Air



MARKET'S MOST EFFICIENT AIR WATER GENERATOR

Clean drinking water is one of society's necessities. Drupps provides an innovative and flexible solution for converting ambient air into clean drinking water regardless of location, without any ecological footprint.

These systems feature novel and patented humidity absorption technology, enabling highly efficient attraction and condensation of airborne humidity even in cold or dry conditions.

Drupps Concept is based on the use of two modules – humidity absorption and evaporation – combining to create powerful and flexible atmospheric water generation.

This is not mere cooling of ambient air or air conditioning. This is next generation sorption technology.

CUSTOMER ORIENTED

Our approach is 100% customer-oriented and we focus on the customer's climate conditions when we design an installation. If the climate is dry, more absorbers are employed. If humid, fewer. There is no one-size-fits-all and we always focus on the customer's actual conditions.

A-MODULE TECH SPECIFICATIONS

Module A type	A1
Function	Humidity absorption
Absorption capacity, LPD/24h	Up to 6,000
Air processing capacity, m3/h	Up to 74,000
Ambient temperature, °C	0-40°C
Ambient humidity, RH%	30*-100%
Length (L), mm	8,000
Width (W), mm	2,500
Height (H), mm	2,500
Dry Weight, kg	4,000
Operating weight, kg	5,000
Electrical equipment	400[VAC] 50[Hz] 3F
Total power installed, kW	11.0
Outlet pump motor, kW	1.5
Circ. pump motor, kW	1.0
Energy efficiency, Wh/L	20-114
Humidity absorption media	Drupps FLOW
Compressor	No compressor
Refrigerant	No refrigerant
Operating control	Automatic op. 24h, 7d/w
Communication	Fiber optic/Modbus/Mobile
Manufactured in	Sweden
Main reference legislation	Machinery Directive (2006/42/EC) Electromagnetic compatibility (2014/30/EC) Electrical safety (EN 60204-1) Pressure Equipment Directive (PED) (2014/68/UE)
Outdoor use approval	Yes
Overvoltage category	IV
Lightning strike resistant	Yes
Sandstorm resistant	Yes
Shipping	Shipped as standard 20-ft container
Main service need	Air filters, FLOW filters
Service interval	Dep. on ambient air quality

HIGH PURITY WATER

Drupps Concept employs six cleaning steps. The air is 1) filtered from debris and sand before being 2) scrubbed in liquid desiccant (FLOW) that effectively sediments all smog particles, dust and airborne chemicals. The FLOW effectively 3) kills all living organisms. In the next stage, the FLOW is 4) boiled, creating steam which efficiently separates the absorbed water from the FLOW. The steam is condensed and collected before being 5) filtered through active carbon and 6) sterilized by UV. The result is 100% pure water. To reach the right composition, we offer alkanization as an optional add-on.

OPTIONAL EQUIPMENT

- + Alkanization of produced water
- + Communications protocols (mobile, Modbus)
- + Remote control via app

PRODUCT QUALITY

Our absorbing module (A- module) is designed and manufactured in Sweden. The evaporating module (B- module) is developed and manufactured in the EU by well-established water industry companies. This guarantees the highest product quality and safety measures.

BASIC EQUIPMENT

A full Drupps Concept system always include at least one A- module and one B- module that are connected in a FLOW loop. Supporting these modules are two C- modules (service points), as well as a water storage tank and one E- module (end-step) guaranteeing long-term storage water quality.

B-MODULE TECH SPECIFICATIONS

Module B type	WHITE	BLUE	GREEN
Function	Water evaporation and distillation		
Main evaporation energy	Electricity	Electricity	Thermal
Capacity, LPD/24h	2,000-20,000	20,000-200,000	20,000-200,000
Ambient temperature, °C	0-40°C	0-40°C	0-40°C
Water quality	WHO standard		
Length (L), mm	4,000-7,000	5,000-10,000	5,000-10,000
Width (W), mm	2,500	3,000	3,000
Height (H), mm	2,800	3,000	3,000
Dry Weight, kg	3,000-4,000	5,000-30,000	5,000-10,000
Operating weight, kg	4,000-5,000	6,500-35,000	6,500-35,000
Electrical equipment	400[VAC] 50[Hz] 3F		
Total power installed, kW/LPD			
Power consumption, kWh/L	0.180	0.072	0.030
Thermal energy (steam/hot water), °C	-	-	70-150
Thermal energy consumption, kWh/L	-	-	0.45 to 0.7
Operating control	Automatic operation 24h/d, 7d/w		
Manufactured in	Italy	Sweden	Sweden
Main reference legislation	Machinery Directive (2006/42/EC) Electromagnetic compatibility (2014/30/EC) Electrical safety (EN 60204-1) Pressure Equipment Directive (PED) (2014/68/UE)		