

What We Do

The AirJoule™ technology platform is the most efficient way to separate water from air. As an outdoor water generation system, it delivers reliable, distributed pure water to strengthen water security and resilience. For commercial and industrial applications, AirJoule™ dehumidifiers maintain dry storage environments, reduce operating costs, and generate water as a valuable byproduct.

**AIR IN.
WATER OUT.**

Our Mission

Freeing the world from its water and energy constraints by delivering groundbreaking sorption technologies.

- Decarbonizing HVAC systems through greater energy efficiency
- Providing cost effective and scalable water harvested from air
- Enabling recovery of water lost through process evaporation
- AirJoule's advanced efficiency delivers cost-effective moisture control





SOLUTIONS

Water From Air

AirJoule provides independent and reliable access to water, reducing dependency on existing infrastructure and addressing water scarcity. Water is produced at scale using superior energetics compared to competitive technologies.

Moisture Control

AirJoule reduces external power requirements and operational costs for moisture control and drying through use of cutting edge dehumidification technology. Compared to conventional desiccants, AirJoule can remove the same amount of moisture but at a fraction of the operational cost.

Heating, Ventilation, & Air Conditioning

By utilizing AirJoule to harvest water vapor from the air, power consumption can be reduced by up to 75%.

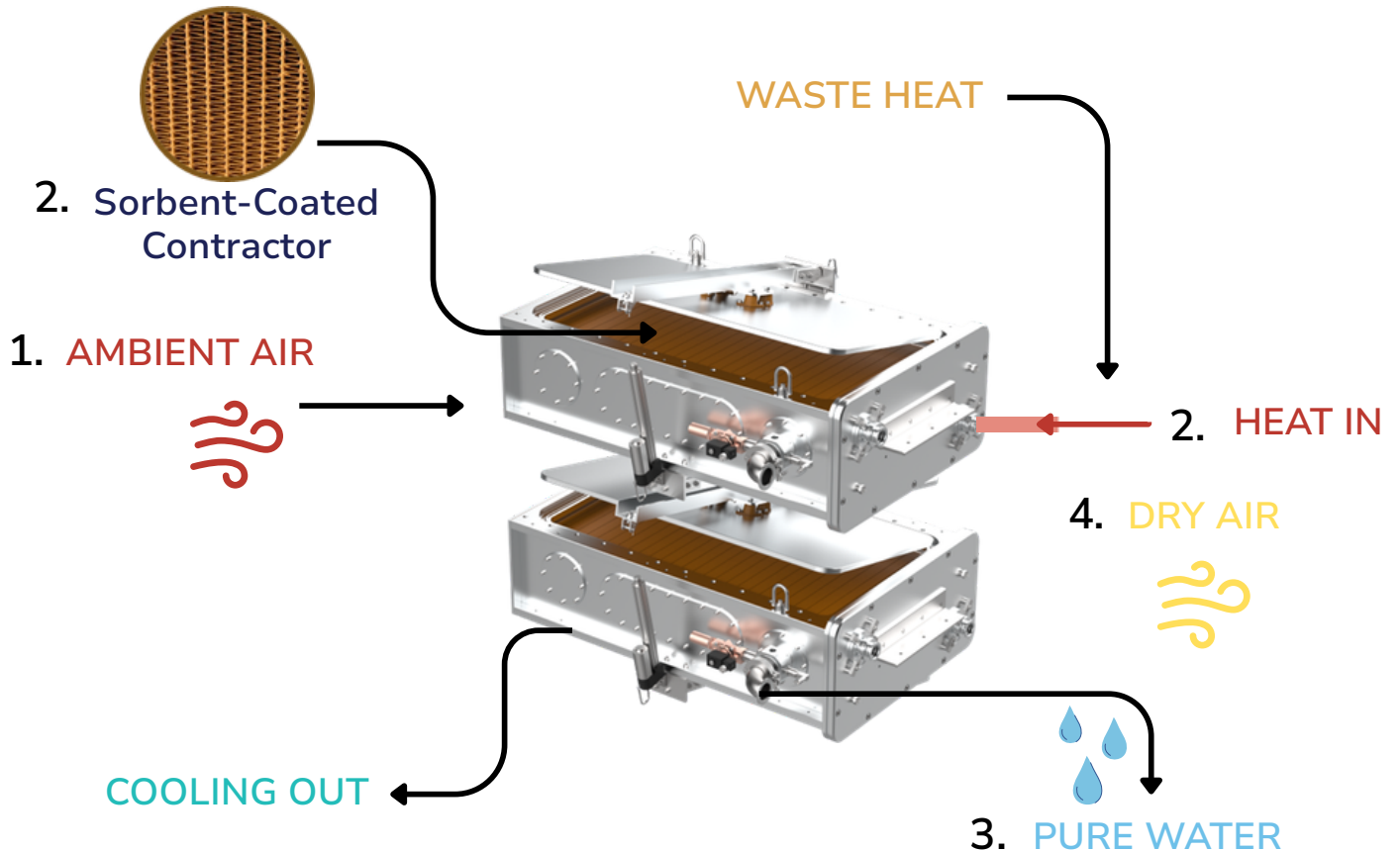
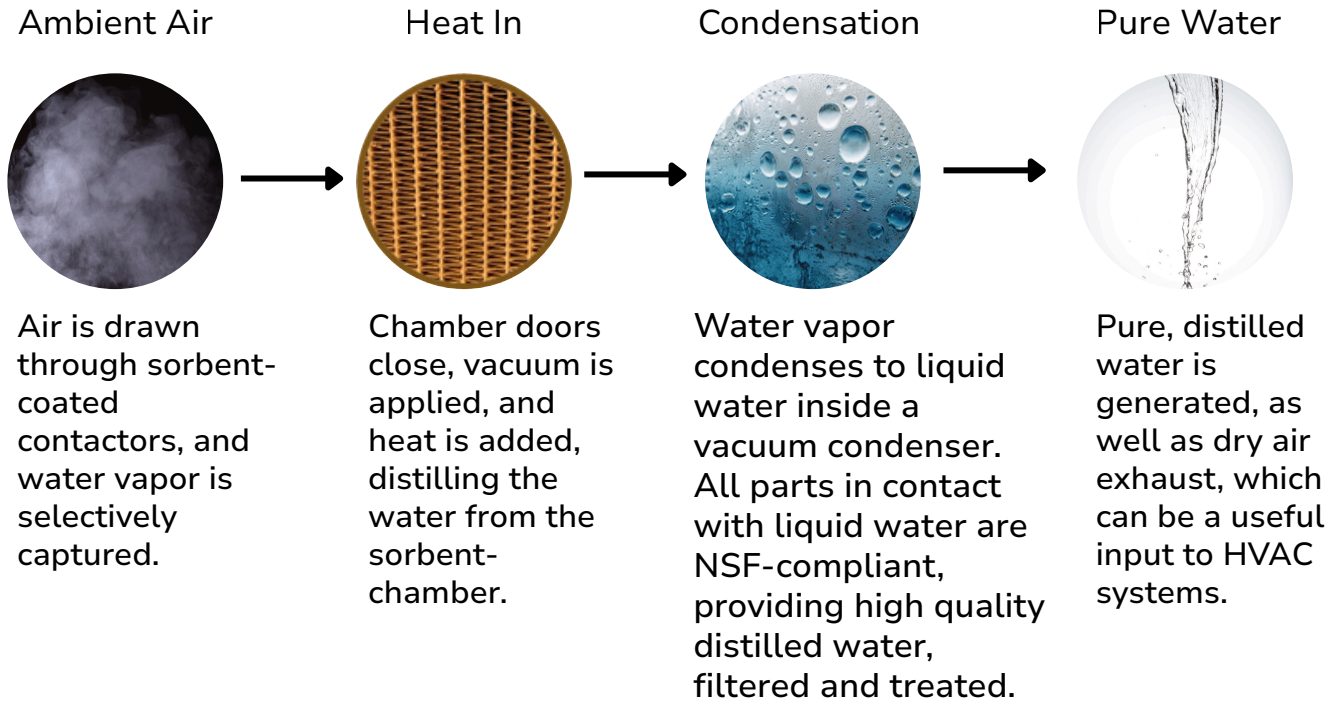
Water Recovery

AirJoule enabled water recovery reduces environmental impact, lowers operational costs, and promotes sustainable water management. Optimized integration and energy utilization enables AirJoule water recovery to be cost competitive with conventional practices.





How Our System Works



AirJoule CORE

Advanced Atmospheric
Water Harvesting System



Daily Water Output

Produces up to 250 liters of clean, distilled water per day.



High Capacity Dehumidification

Removes, up to 250 liters of moisture per day and helps maintain indoor humidity levels as low as 30% RH.



Low Training Operation

Semi-automated operation with minimal setup and training required.

- Designed for reliable performance across a wide range of environmental conditions.
- Produces high-purity water suitable for advanced manufacturing, equipment cooling, boiler feed, or remineralized for on-site drinking water.



Water Production	Up to 250L/day (66 gal)
Operating Condition	5°C-50°C ambient temperature, as low as 30%RH
Water Quality	Distilled Water, Remineralized or Purified for a Purpose
Power Requirements	<p><u>North America:</u> A250: 208 Vac 60Hz 3P+N+G 30A Heat Pump: 208 Vac 60Hz 3P+N+G 40A</p> <p><u>Rest of World:</u> A250: 400 Vac 50Hz 3P+N+G 20A Heat Pump: 400 Vac 50Hz 3P+N+G 20A</p>
Power Efficiency Target	With Heat Pump: 0.50 kWh/L (1.9 kWh/gal)
Ave. Operating Power Consumption	A250 with Heat Pump: 5.5kW
Peak Power Requirement	10kW
Dimensions LxWxH	<p>A250: 2.8m X 1.6m X 2.3m (9'2" x 5'3" x 7'7") With Exterior Heat Pump (Pre-Production only): 3.8m X 2.5m X 2.3m (12' 6" x 8'3" x 7'7")</p>
Est. Weight	1900kg
Noise Level	60 dBA at a 6 m (20 ft) Distance
Airflow	Up to 5100 m ³ /hr (3000 CFM)

Airjoule uses site-specific information to work with customers to understand potential water production and energy demand due to seasonal variation.

AirJoule Core Performance Model
AirJoule Core Water Production (Liters per hour)
Relative Humidity (%RH)

Temperature (°C)	Relative Humidity (%RH)													
	30	35	40	45	50	55	60	65	70	75	80	85	90	95
10	2	3	4	5	6	7	7	8	9	9	10	10	10	11
15	2	3	4	5	6	7	7	8	9	9	10	10	10	11
20	3	4	4	5	6	7	8	8	9	10	10	10	11	11
25	3	4	4	5	6	7	8	8	9	10	10	10	11	11
30	2	3	4	4	5	6	7	8	8	9	9	10	10	10

AirJoule Core Performance Model
AirJoule Core Electrical Energy Demand (kW)
Relative Humidity (%RH)

Temperature (°C)	Relative Humidity (%RH)													
	30	35	40	45	50	55	60	65	70	75	80	85	90	95
10	1.1	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.5	1.5
15	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.4
20	1.3	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2
25	1.2	1.4	1.4	1.4	1.3	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.1
30	0.9	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4



AirJoule offers a transformational climate technology that enables the atmosphere to become an around-the-clock water resource.

AIR IN. WATER OUT.

A next-generation desiccant dehumidification system that achieves over 50% energy savings versus conventional technologies. Capable of maintaining humidity levels as low as 30% RH, it removes up to 8 liters of moisture per hour. The unit features plug-and-play installation with no reactivation air ducting required and generates distilled water as a clean by-product.



Contact

If you are interested in learning more about how AirJoule's technology can help you solve your cooling or water challenges, please email us at contact@airjouletech.com or visit our website to contact us!

<https://airjouletech.com>