# HYDRABOX — Decentralized Water, Anywhere

### **Mission**

HydraBox is a portable, atmospheric water generator designed to unlock **clean**, **drinkable water directly from air** — anytime, anywhere. Our mission is to deliver water independence to remote, off-grid, and climate-challenged communities worldwide.

### **?** The Problem

- 2+ billion people lack access to safe drinking water.
- Infrastructure is costly, centralized, and slow to deploy.
- Climate change and population growth are intensifying scarcity.
- Existing AWGs are bulky, power-hungry, and not field-ready.

# **♦ The HydraBox Solution**

A **thermos-sized, solar-powered AWG** that condenses atmospheric moisture into safe drinking water without plumbing or infrastructure.

Portable: Backpack-sized and deployable in minutes.

Efficient: Solar, battery, or grid-powered for off-grid use.

Clean: Built-in carbon + UV-C purification.

## **₹**Applications

- Humanitarian aid & disaster relief
- WASH & rural development projects
- Military & field operations
- Outdoor, expedition, and research use
- Consumer off-grid water solutions

#### Partnership Opportunities

We're seeking collaborations with universities, investors, NGOs, and field organizations to pilot HydraBox and accelerate development in real-world environments.

### Core Technology

HydraBox integrates a **multi-stage water-harvesting system** to maximize yield per watt:

- Thermoelectric Condensation (TEC): Peltier modules cool surfaces to condense vapor.
- Adsorptive Sorbents: Silica gel / MOFs capture humidity and release it with low heat.
- Vapor Compression Cycle: Micro-compressors accelerate condensation for higher efficiency.
- Capillary Filtration: Moves water passively without pumps.
- **Hybrid Power:** Solar, battery, or grid compatible.
- Multi-Stage Purification: Activated carbon +
  UV-C ensure potable water output.

#### X Development Roadmap

- 2025 Q4: Finalize V1 prototype (200–500 mL/day)
- 2026 Q1: Field pilots with NGOs & universities
- 2026 Q2: File full patent & pre-manufacturing
- 2026 Q3-Q4: Commercial launch & B2B deployment

#### About Hydratech Industries

Founded in California, Hydratech Industries is pioneering decentralized water solutions with a mission to make **water independence a universal human right** — one drop at a time.

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