

# ARC Hydro

Portable Micro-Hydro Turbine — 800-1,000W | Silent | 24V DC | Continuous Output

**PROTOTYPE / PRE-PRODUCTION STATUS — Specifications indicative. Pre-production orders and registered interest are now being accepted.**

## OVERVIEW

The Powapacs ARC Hydro is a portable micro-hydro turbine system designed to harvest continuous power from flowing water. Based on Turgo turbine technology, the unit delivers 800 to 1,000W of silent, zero-emission 24V DC output from a minimum head of 10 metres — providing 24-hour generation capability independent of sun or wind.

Unlike solar and wind, micro-hydro delivers consistent, predictable output around the clock. A single ARC Hydro unit running continuously can produce 19 to 24 kWh per day — significantly more than solar or wind alternatives — making it the highest energy-density option in the Powapacs ARC range where flowing water is available.

Designed for rapid field deployment, the system is self-contained, lightweight at 25kg, and integrates directly with the Powapacs HSR and HSX range via the standard 24V DC input. Suitable for river, stream, canal, and gravity-fed water source deployment.

Target use cases include mountain and highland FOBs, river crossing points, expeditionary base camps, remote construction sites, and humanitarian operations in terrain with reliable water flow.

Currently in prototype phase. Pre-production orders and registered interest are being accepted. Final specifications subject to change. Patent Pending: GB2509317.8.



[ Product Image ]  
ARC Hydro

**800-1,000W** Rated Output | **24V DC** Output Voltage | **10m** Min Head Required | **25 kg** System Weight

## INDICATIVE SPECIFICATIONS

SPECIFICATION	VALUE
Turbine Type	Turgo micro-hydro turbine
Rated Output	800 - 1,000W
Output Voltage	24V DC
Minimum Head Required	10 metres
Daily Energy Yield	19 - 24 kWh (continuous operation)
Operation	Silent — zero mechanical noise at point of use
Emissions	Zero — no fuel, no exhaust
HSR / HSX Compatible	Yes — direct 24V DC input
ARC System Compatible	Yes — combines with ARC Solar and ARC Wind
System Weight	25 kg
Water Source	River, stream, canal, gravity-fed supply
Deployment	Rapid field deployment, single person
Development Status	Prototype / Pre-Production
Pre-Production Orders	Now being accepted
Patent	Pending: GB2509317.8

## PRIMARY USE CASES

Military & Defence	Construction & Civil Engineering	Humanitarian & Emergency Response
Mountain and highland FOBs, river crossing points, and remote base camps where continuous 24-hour power is required.	Remote upland and riverside construction sites with reliable water flow — continuous recharging without solar or wind dependency. Subject to change without notice.	Flood-affected zones, mountain communities, and expeditionary operations where flowing water provides a reliable power source.

Points and remote base camps where continuous 24-hour power is required. | Indicative specifications only. Subject to change without notice. | [www.powapacs.co.uk](http://www.powapacs.co.uk)