

SMART MONOFLOAT

This turbine is designed for rivers, featuring a reinforced debris protection and a patented anchoring system. The anchoring can be done at the bottom of the river, at a bridge support, or at a block on the side of a river.

This turbine is ready to overcome:

- variable water depth and velocity
- floating debris of various materials and sizes



Base load power supply



Easy installation



Minimal space required



Low infrastructure costs (no dams)



No environmental impact



Minimal audible disturbance

One diving float

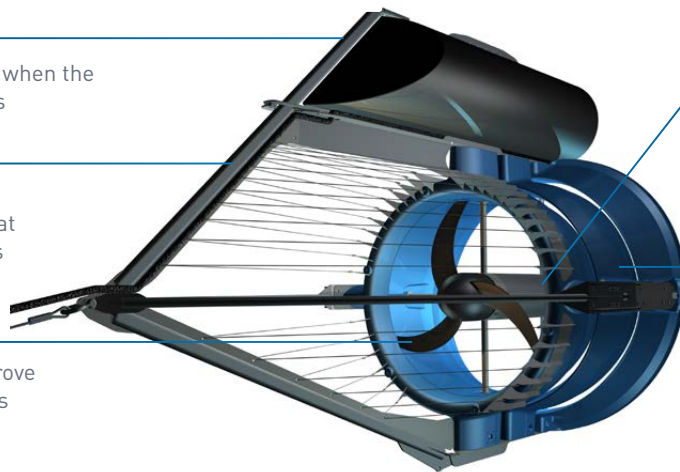
submerges to avoid debris when the water flow speed increases

Debris protection

stainless steel cables are carefully designed such that debris neither accumulates nor damages the blades

Rotor

slightly curved blades improve performance against debris



5 kW underwater generator

permanent-magnet generator provides three-phase AC power

Diffuser

protects the generator and increases water velocity when passing through it

Output	250 – 5000 W
Dimensions	Length: 3130 mm Width: 1600 mm Height: 2010 mm
Rotational speed	90 – 230 rpm
Weight	380 kg
Number of rotor blades	3
Rotor \varnothing	1000 mm

Specifications:

- The permanent magnet underwater generator provides AC power
- Dives when water level rises
- Especially suitable for waters with heavy debris
- Expandable system with multiple turbines
- Available as an off-grid solution, grid-connected and hybrid version
- Scope of delivery and specifications can be adapted to special projects
- Max. power output at 2.8 m/s

Anchorage dependent on:

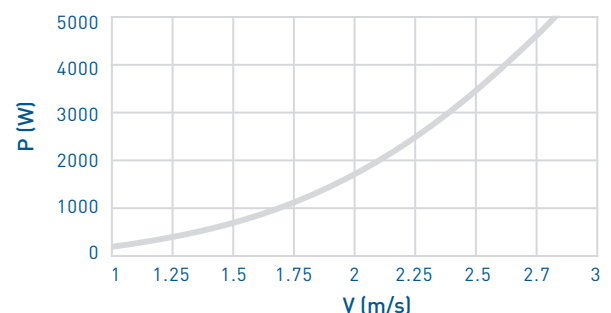
- Hydrological characteristics (e.g. riverbed type: rock, sand, etc.)
- Ship traffic/kayak/tourism
- Amount/type of flotsam/debris
- Width and depth variation of river

Requirements:

- Min. river depth: 2.0 m
- Min. river width: 2.0 m
- Injection point: max. 500 meters distance from turbine

Output curve of the generator

Max. power output at 2.8 m/s



Power curve tested at towing tank of SVA Potsdam. Results may vary in natural rivers & canals. Curve was measured at the generator output.