SMART MONOFLOAT TURBINE

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

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 curve of the generator:
- Max. power output at 2.8 m/s

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 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 ø: 1000 mm

Output curve of the generator

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