Suite 15, 18 Stirling Hwy, Nedlands, Western Australia 6009 Tel: 08 9386 2366 Mob: 0408 928 530

Email wes@water.net.au

AirDolphin Australia

E: wes@water.net.au

T: 1800 1 Solar T: 08 9386 2366

https://airdolphin.com.au/

AirDolphin Mark-Zero Z-1000-24 Marine Wind Turbine 1000 Watt









AirDolphin Australia 1 | 6

Suite 15, 18 Stirling Hwy, Nedlands, Western Australia 6009 Tel: 08 9386 2366 Mob: 0408 928 530

Email <u>wes@water.net.au</u>

AirDolphin Australia

E: wes@water.net.au

T: 1800 1 Solar T: 08 9386 2366

https://airdolphin.com.au/

AirDolphin Mark-Zero Marine Wind Turbine 1000 Watt

Introducing the latest evolution in small wind turbines **AirDolphin Mark-Zero Z-1000-24 Marine Wind Turbine**. It is quieter, more efficient and precision engineered to deliver more energy at lower and dynamically changing wind speeds common in marine and offshore environments.

Designed for harsh and rugged environments, it is useful for a variety of battery charging applications, such as 24/7 battery charging, back-up power supply for yachts, sailboats, power boats, remote monitoring systems, standalone power systems and remote homes while delivering quiet, more consistent energy.

Features

- 1 year warranty / Rugged 20 year life
- Low mass High Tech Foam Filled Carbon Fiber Composite blades
- Total mass of AirDolphin is only 17.5 kg
- Low Speed start up at 2.50 m/s (5.6 MPH)
- Dual Brush system provides for maximum power transfer
- Brushless neodymium alternator
- 1000 W at 12.50 m/s (28 MPH)
- Rated to 65.00 m/s 145 MPH winds
- Heavy duty power generator with max. 4.5kW power output
- Mounts on standard 1.9" diameter mast
- Neighbour Friendly known as Urban Turbine



Suite 15, 18 Stirling Hwy, Nedlands, Western Australia 6009 Tel: 08 9386 2366 Mob: 0408 928 530

Email wes@water.net.au

AirDolphin Australia

E: wes@water.net.au

T: 1800 1 Solar T: 08 9386 2366

https://airdolphin.com.au/

Capturability Design Factor Empowers the Wind

AirDolphin design focus was to maximize its efficiency to capture the lowspeed, disturbed and/or quick direction changing winds which it does through these unique features:

- Power Assist Start-up Function
- Seamless Responding Rotor
- Ultra-Lite Design (38.5 lbs)
- Swing Rudder Tail System allowing for instant wind direction tracking

Specifications and Rudder Design

Rotor Diameter: 71" (1.8 meters)

Weight: 38.5lbs (17.5kg)

Start up wind speed: 5.6 mph (2.5 m/s)

Voltage: 24 & 48 VDC PRO or 280 VDC GTO (Grid Tie Optimized)

Output: 1000 watts at 28 mph (12.5 m/s)

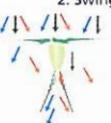
The rudder of the Airdolphin uses the newlydeveloped Swing Rudder System. This system ensures the turbine's superior response to sudden changes in the direction of wind, improving the efficiency of power generation.

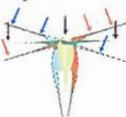


1. Conventional Rudder



2. Swing Rudder System





- The wind force passes through the rotor disc to the tail, and the resulting inertia swings the
 rotor disc past the new apparent wind. This exposes the tail to the wind force on the opposite
 side, causing directional overshoot.
- With our newly developed Swing Rudder System, the tail inertia is interrupted by the body joint, which swings the tail in the opposite direction. This ensures that the rotor disc is evenly balanced inside the wind force, without directional overshoot.

AirDolphin Australia 3 | 6

Suite 15, 18 Stirling Hwy,

Nedlands, Western Australia 6009 Tel: 08 9386 2366 Mob: 0408 928 530

Email wes@water.net.au

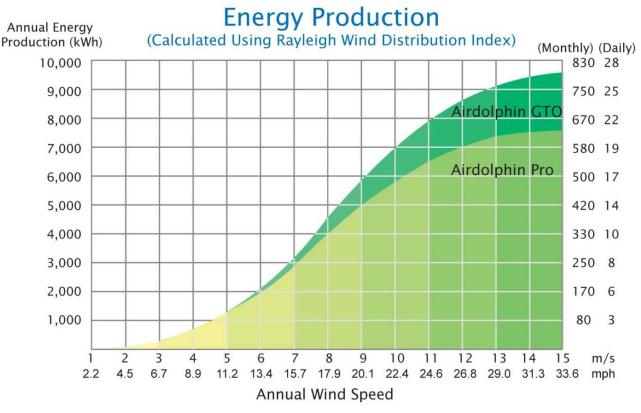
AirDolphin Australia

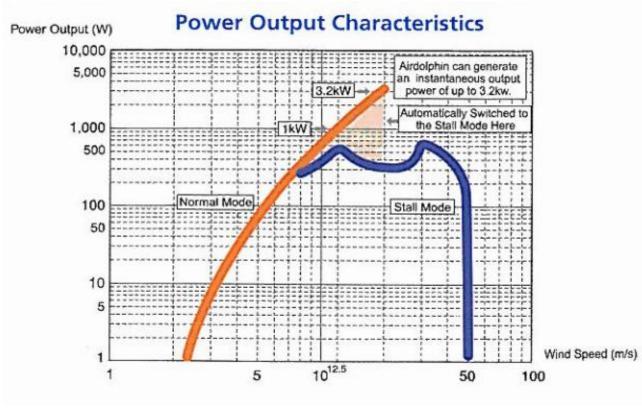
E: wes@water.net.au

https://airdolphin.com.au/

T: 1800 1 Solar T: 08 9386 2366

Annual, Monthly and Daily Energy Production





Suite 15, 18 Stirling Hwy, Nedlands, Western Australia 6009

Tel: 08 9386 2366 Mob: 0408 928 530

Email wes@water.net.au

Intelligent Power Management System

AirDolphin Australia E: wes@water.net.au

T: 1800 1 Solar T: 08 9386 2366

https://airdolphin.com.au/

The industry's first Intelligent Power Management System from Zephyr flexibly responds to sudden changes in wind speeds, and adapts accordingly by creating the most suitable power curve for the Airdolphin with constant monitoring of wind force shifts.

* Note: The traditional static power curve can no longer follow Airdolphin's full dynamic power generation characteristics.

The orange zone on the above chart indicates the range where the Airdolphin is ready to operate in "stall" mode. When followed by the built-in microprocessor's order to switch from "normal" to "stall" mode, rpm's can instantly decline. The reverse switch from "stall" to "normal" mode occurs when the wind speed has fallen to levels safe enough for the Airdolphin's operation.

For the first time in the wind industry, the Intelligent Power Management System has succeeded in a truly seamless power generation performance for a broad wind spectrum ranging from 2.5m/s to 50m/s.

Airdolphin Mark-Zero (24V) or Airdolphin Pro (48V),

Airdolphin Z-1000 is now sold as either Airdolphin Mark-Zero (24V) or Airdolphin Pro (48V), with the Pro marketed primarily to provide independent power sources for remote telecoms base stations.

Air Dolphin Marine Wind Turbines are a heavy duty marine grade product with built-in controller/regulator. Hand laid carbon fiber blades makes this a rugged and durable product for any location around the world.





Suite 15, 18 Stirling Hwy, Nedlands, Western Australia 6009

Tel: 08 9386 2366 Mob: 0408 928 530

Email wes@water.net.au

AirDolphin Australia

E: wes@water.net.au

T: 1800 1 Solar T: 08 9386 2366

https://airdolphin.com.au/





Tel: 1800 1 Solar Tel: 08 9386 2366 Email: wes@water.net.au

https://airdolphin.com.au/