



Airdolphin PRO / Mark-Zero	
Model Number	Z-1000-48 / Z-1000-24
Wind Turbine Type	Horizontal axis, up-wind
Rotor Diameter	1800mm (5'10-7/8")
Mass	17.5kg (38lbs. 8oz)
Tower Diameter	48.6mm (1-15/16")
Number of Blades	3
Blade Material	Carbon-fiber skin
Blade Mass (per piece)	380g (13oz)
Blade Retention	Interlock hub mounting
Body Material	Aluminum die cast
Body Construction	Screw-free joints (based on traditional Japanese handicrafts)
Product Finish	Teflon-based paint
Power Generator	Synchronous-type, three-phase power generator with permanent magnets(neodymium iron boron magnet)
Control System	<p>Built-in Zephyr-Original Power Management System* (ZPMS) with:</p> <ol style="list-style-type: none"> 1. Power-Assist Function 2. Seamless Power Control Functions 3. Safety Control 4. Battery Charge Management 5. Data Communication System
Protection Circuit	Built-in
Data Logger	Built-in (Total energy production)
Yaw control	Free yaw (360 degrees)
Direction Control	Original Swing-Rudder System
Start-up Wind Speed	0m/s (Power-Assist Function)
Cut-in Wind Speed	2.5m/s, 5.6mph
Rated Power	1kW (12.5m/s, 27.9mph)
Rated Rotor Speed	1000rpm
Maximum Power	2.3kW (20m/s, 44.7mph)
Maximum Rotor Speed	1000rpm (20m/s, 44.7mph)
Mass per Watt	17.5g (1oz.)/W (at rated power)
Power per Square Meter	393W/m ² (36.5W/ft ²) (at rated power)
Output Voltage (Normal Mode)	DC25V / 50V
Braking System	Regenerative electromagnetic braking system
Communication System (Signal Output)	RS-485
Recommended system	Off-grid : Deep cycle lead acid battery,500Ah or more