



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