

# Product Comparison

Aerofortis Overview



	Aerofortis	Others
<b>Controller</b>	<b>High Efficiency, Full Function and Long Life Time</b>	
Display	Instant Wind/PV input information at front page. Multi-information LCD. Wind/PV/Battery Input/Output. Battery/Charger temperature monitoring. Multi-LED indicators.	No LCD screen. Basic LED indicators.
Electrical Design	PFC (Power Factor Correction) design, no electro-magnet vibration in operation. Full heat transfer analysis for max. operational life time.	Simple bridge rectifier, excessive vibration in operation. N/A
MPP Tracker	Efficient and independent trackers for both wind and solar input.	Basic or no trackers.
Efficiency	>85% (Charger)/>95% (97% Max for Inverter)/99% (Sigma Energy Integrator)	<55% (Charger)/<80% inverter.
COM Port	RS-485 standard, USB/Bluetooth/GSM optional.	No COM port.
Input	Hybrid Wind/PV for both charger and inverter.	Wind only.
<b>Turbine</b>	<b>Advanced CFD Design and Wind Tunnel Tested</b>	
Blade	Ducted aerodynamic diffuser design, extremely high efficiency, $C_p > 0.7$ Ultra low noise level. All-in-one design, only one nut required for blade assembly.	Conventional 3-blade, poor efficiency, $C_p < 0.3$ High noise level with severe vibration. Complex installation with numerous screws.
Generator	Down-wind design for min. vibration Exceptionally low rated RPM (150RPM for 650W VAWT) Multiple installations per pole. (VAWT "Energy Tree")	Up-wind design causes serious vibration to the system. >500 RPM One per pole.