

● Key Technology & Innovation

- Waterproofing
- Sealed Sweden SKF bearing
- Unique designs to keep water and moisture out
- Unique Anti-Vibration design
- Efficient Aero-dynamic design
- Electromagnetic Emergency Breaking system
- Innovative and durable materials
- Unique earth permanent magnetic material
- Low Noise Level

● Durability

- Five-Year Limited Guarantee
- Highest quality manufacturing standards
- Wide range of temperature tolerance
- High salt fog & wind sand resistance
- Strong wind resistance & high survival wind speed
- Durable materials & components(i.e. Sweden's SKF bearing & Germany's SMA inverter & components)

Airforce 4.1

● High Efficiency

- ADJUSTABLE blade angles and blade design to achieve maximum efficiency
- Low Start Wind Speed ONLY 1.8 m/s!
- Large range of wind speed usability
- Cp value-about 0.43
- Germany SMA component collaboration

● Easy transportation & Installation

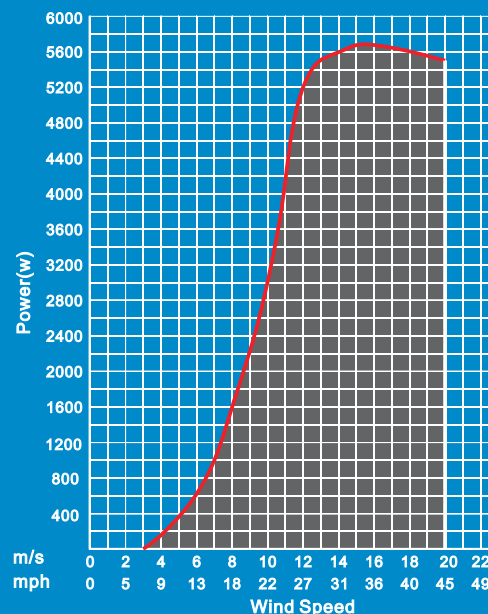
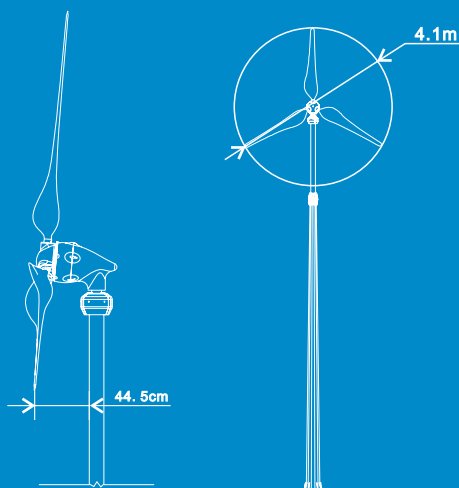
- Light weight and compact size
- Intuitive online installation guides
- Wide installation & maintenance network worldwide

Airforce 4.1

Specifications



Model	Airforce 4.1
Max. output power	5kW
Rated wind speed	12m/s
Max. wind speed	25m/s
Survival wind speed	60m/s
Start-up wind speed	1.8m/s
Cut-in wind speed	3m/s
Rated rotational speed	350rpm(2.5KW)/450rpm(5.0KW)
Max. rotational speed	580rpm
No. of blades	3
Rotor diameter	4.09m
Blade length	2.02m
Blade material	FRP
Generator	3 phase PM generator
Braking system	Electromagnetic braking system control
Type	Downwind rotor
Yaw control	passive
Total weight	120kg
Warranty	5 years
Controller	Protection controller for generator
Grid-tied inverter	120/240VAC,50/60HZ (optional)
Tower	12m (optional)



Please contact our sales representatives for further system and pricing details.

Airforce 4.1

5.0KW Grid-tied Model

Independently-tested and CE-certified,
Hopeful Energy's Airforce 4.1 model utilities gearless,
direct drive architecture, unique permanent magnet generator,
and integrated SMA inverter to provide best-in-class wind energy capture,
low maintenance, and high return on your investment.

<i>Technical Specifications Comparison</i>			
	Hopeful Energy	Southwest	Bergey
Model	Airforce 4.1	Skystream 3.7	BWC Excel
Max. output power	5.0 KW	2.4 KW	10 kW
Rated wind speed	12 M/S	20 mph / 13 m/s	13.8 m/s (31 mph)
Max. wind speed	25 M/S	25 M/S	54 m/s (120 mph)
Survival wind speed	60 M/S	140 mph / 63 m/s	54 m/s (120 mph)
Start-up wind speed	1.8 M/S	3 m/s	3.4 m/s (7.5 mph)
Cut-in wind speed	3 M/S	8 mph / 3.5 m/s	3.1 m/s (7 mph)
Rated rotational speed	450 RPM	330 rpm	310 rpm
No. of blades	3	3	3
Rotor diameter	4.1 M	12 feet / 3.72 meters	6.7 m (22 ft.)
Blade material	FRP	Fiberglass reinforced composite	FRP
Generator	3 Phase AC, Variable Frequency /Permanent Magnet Alternator	3 Phase AC, Variable Frequency /Permanent Magnet Alternator	3 Phase AC, Variable Frequency /Permanent Magnet Alternator
Braking system	Electromagnetic braking	Electronic stall regulation w/ redundant relay switch control	Furling
Type	Downwind rotor	Downwind rotor with stall regulation control	3 Blade Upwind
Yaw	Passive	Passive	Furling
Total weight	265 lbs. / 120 kg	170 lbs. / 77 kg	1200lbs. / 545 kg
Power Output	41W/KG	31W/KG	8W/KG
Warranty(Limited)	5 years	5 years	5 years
Grid-tied inverter	Yes, 120/240 VAC, 50/60 HZ(optional)	Yes, 120/240 VAC, 50/60 HZ(optional)	Yes, 120/240 VAC, 50/60 HZ(optional)
Tower Height (recommend):	12 M(optional)	9 –18 M (optionl)	18 and up M (optional)
Listed Price (USD):	19800	12000	29500

Best value for your money!

High investment return

Short Return On Investment Life-Cycle

Contact us for a free custom-made ROI calculation just for you!