

TURBINE

Configuration	3 blades, horizontal axis, upwind
Rated power @ 11 m/s	5.3 kW
Applications	Direct grid-tied
Rotor speed	166 rpm
Cut-in wind speed	3.0 m/s (6.7 mph)
Cut-out wind speed	24 m/s (54 mph)
Survival wind speed	53 m/s (119 mph)
Design lifetime	30 years *
Overall weight	272 kg (600 lbs)

ROTOR

Rotor diameter	6.04 m (21 ft)
Swept area	31.9 m ² (343 ft ²)
Blade length	3.2 m (10.5 ft)
Blade material	Fiberglass / Epoxy
Power regulation	Stall control (constant speed)

GENERATOR

Frequency	60 Hz
Voltage	120-240 VAC
Phase	Single phase
Type	Induction generator

BRAKE & SAFETY SYSTEMS

Main brake system	Rapid fail-safe dual redundant brakes on rotor shaft
Secondary safety system	Redundant back-up brake on rotor shaft
Automatic shut down triggered by :	<ul style="list-style-type: none"> - Over speed - High wind speed - Grid failure - All other fault conditions

CONTROLS

PLC based	Includes remote monitoring software
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WARRANTY

Turbine, controls	5 years
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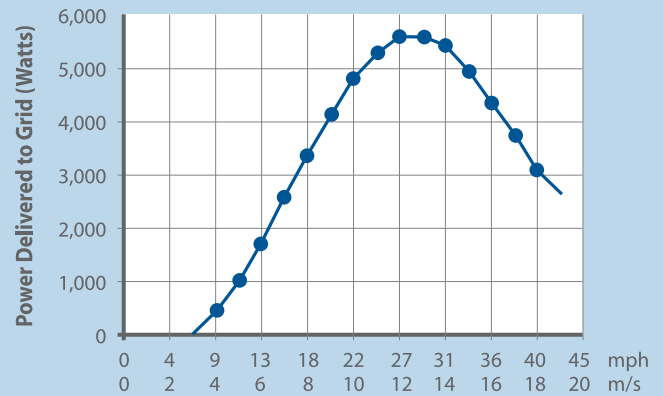
TOWERS

Types and heights	Tubular guyed 19.2 m (63 ft); 25.6 m (84 ft); 32 m (105 ft) and 36.6 m (120 ft) Standard Monopole 30.5 m (100 ft)
Maintenance Access	All are tiltable towers

*Provided service and maintenance schedules are strictly followed

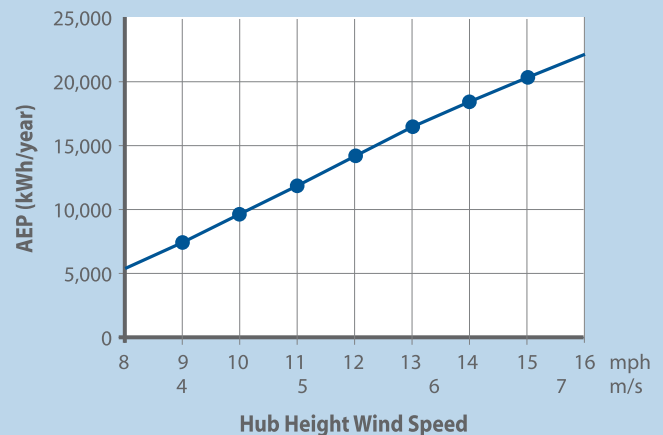


POWER CURVE



IEC 61400-12 standard

ANNUAL ENERGY PRODUCTION (AEP)



WIND SPEED CONVERSION TABLE

m/s	4	5	6	7	8	9	10	12	14	25	32	45
km/h	14	18	22	25	29	32	36	43	50	90	125	160
mph	9	11	13	16	18	20	22	27	31	56	80	100