

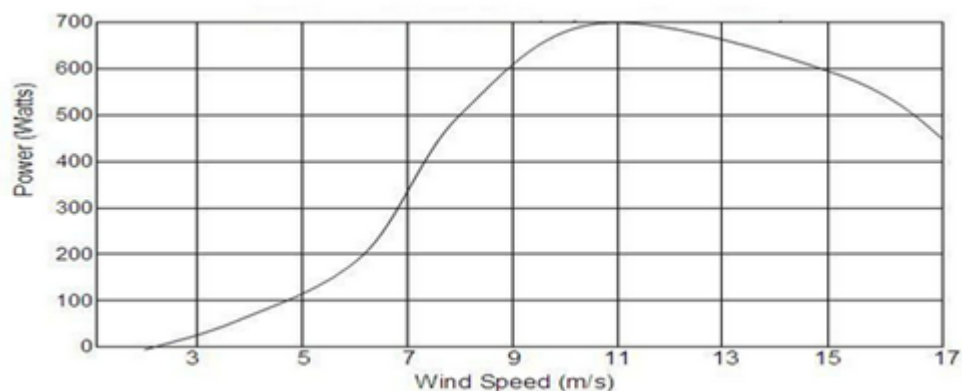
AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	54 kWh
11	5.0	18	94 kWh
13.4	6.0	21.6	162 kWh
18	8.0	28.8	432 kWh
Weibul k = 2			
SPECIFICATION			
MODEL	ZH500W		
ROTOR DIAMETER, METERS/FEET	2.5/8.2		
SWEPT AREA, SQM/ SQFT	4.9/52		
NUMBER OF BLADES	3		
BLADE MATERIAL	FIBRE GLASS REINFORCED		
RATED POWER, WATTS	500		
@RATED WIND, M/S / MPH	8/18		
PEAK POWER @ 12.5 M/S	700		
CUT-IN WIND, M/S / MPH	2.5/5.6		
OUTPUT FORM	12/24VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)		
BLADE PITCH CONTROL	NONE, FIXED PITCH		
NOISE	40DB(A) FROM 50M WITH A WIND SPEED OF 8M/S		
OVERSPEED PROTECTION	AUTOFURL		
GENERATOR	PERMANENT MAGNET ALTERNATOR		
TOWER TOP WEIGHT	65KG.		
LATERAL THRUST	7KN at 50m/s		

500 Watts @ 8 m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Stainless steel components
- Lowest cost per watt



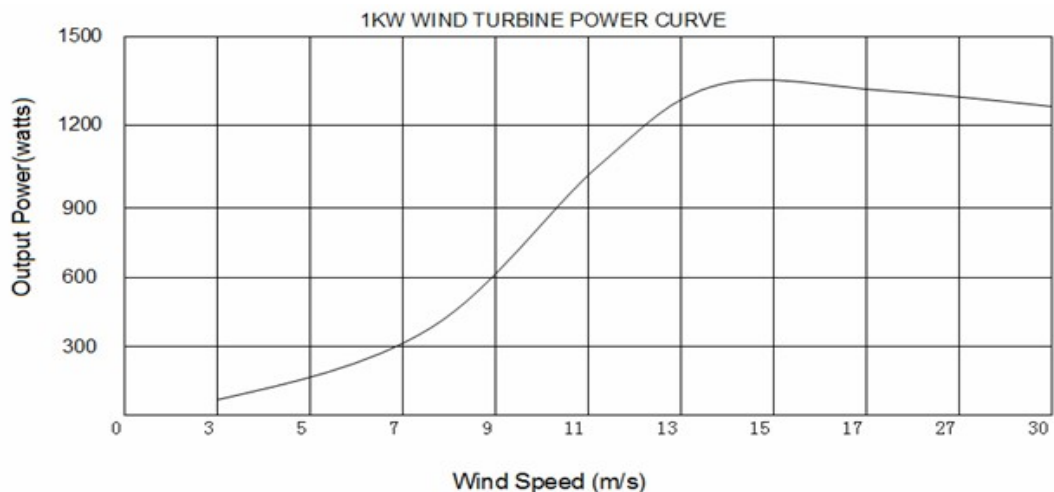
AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	72 kWh
11	5.0	18	108 kWh
13.4	6.0	21.6	144 kWh
18	8.0	28.8	324 kWh
Weibul k = 2			
SPECIFICATION			
MODEL		ZH1KW	
ROTOR DIAMETER, METERS/FEET		2.7/8.7	
SWEPT AREA, SQM/ SQFT		5.7/60	
NUMBER OF BLADES		3	
BLADE MATERIAL		FIBRE GLASS REINFORCED	
RATED POWER, WATTS		1000	
@RATED WIND, M/S / MPH		10/22	
PEAK POWER @ 14 M/S		1300	
CUT-IN WIND, M/S / MPH		2.5/5.6	
OUTPUT FORM		12/24VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)	
BLADE PITCH CONTROL		NONE, FIXED PITCH	
NOISE		40DB(A) FROM 50M WITH A WIND SPEED OF 8M/S	
OVERSPEED PROTECTION		AUTOFURL	
GENERATOR		PERMANENT MAGNET ALTERNATOR	
TOWER TOP WEIGHT		65KG.	
LATERAL THRUST		7KN at 50m/s	

1000 Watts @ 11 m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Stainless steel components
- Lowest cost per watt



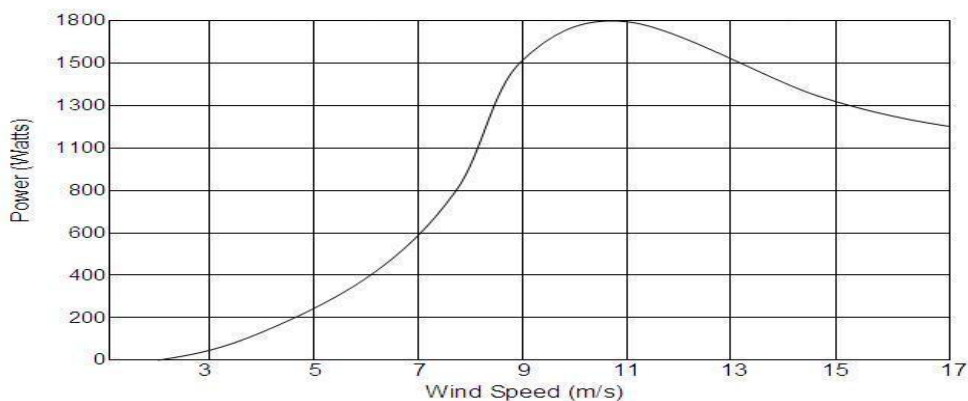
AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	72 kWh
11	5.0	18	158 kWh
13.4	6.0	21.6	288 kWh
18	8.0	28.8	576 kWh
			Weibul k = 2
SPECIFICATION			
MODEL	ZH1.5KW		
ROTOR DIAMETER, METERS/FEET	3.2/10.5		
SWEPT AREA, SQM/ SQFT	8.1/86.6		
NUMBER OF BLADES	3		
BLADE MATERIAL	FIBRE GLASS REINFORCED		
RATED POWER, WATTS	1500		
@RATED WIND, M/S / MPH	9/20		
PEAK POWER @ 12.5 M/S	1800		
CUT-IN WIND, M/S / MPH	2.5/5.6		
OUTPUT FORM	24VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)		
BLADE PITCH CONTROL	NONE, FIXED PITCH		
NOISE	45DB(A) FROM 50M WITH A WIND SPEED OF 8M/S		
OVERSPEED PROTECTION	AUTOFURL		
GENERATOR	PERMANENT MAGNET ALTERNATOR		
TOWER TOP WEIGHT	78KG.		
LATERAL THRUST	9.8KN at 50m/s		

1500 Watts @ 9 m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Stainless steel components
- Lowest cost per watt



AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	108 kWh
11	5.0	18	252 kWh
13.4	6.0	21.6	432 kWh
18	8.0	28.8	1080 kWh
Weibul k = 2			

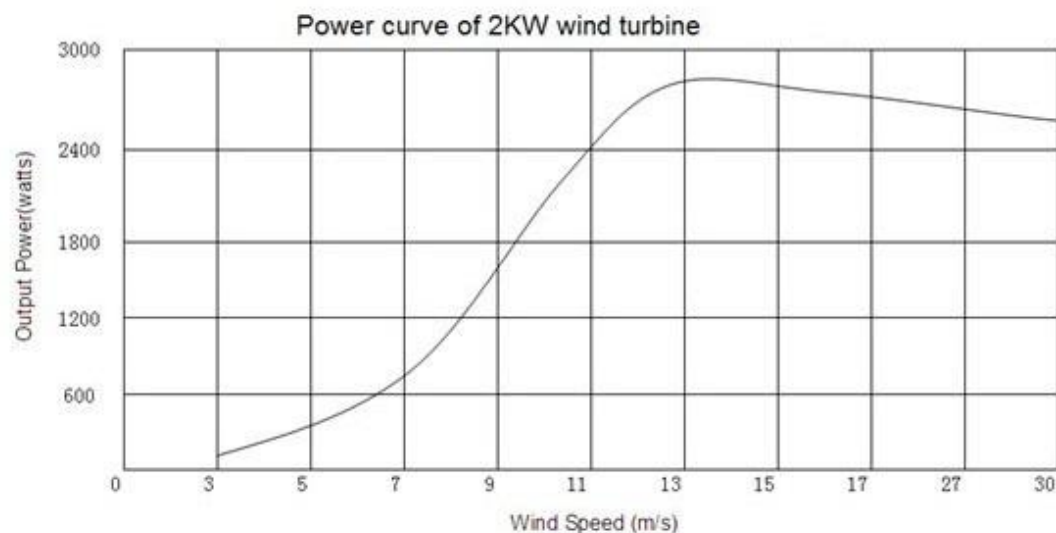
SPECIFICATION	
MODEL	ZH2KW
ROTOR DIAMETER, METERS/FEET	3.6/11.8
SWEPT AREA, SQM/ SQFT	10.2/109
NUMBER OF BLADES	3
BLADE MATERIAL	FIBRE GLASS REINFORCED
RATED POWER, WATTS	2000
@RATED WIND, M/S / MPH	9/20
PEAK POWER @ 12.5 M/S	2500
CUT-IN WIND, M/S / MPH	3/6.7
OUTPUT FORM	48VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)
BLADE PITCH CONTROL	NONE, FIXED PITCH
NOISE	45DB(A) FROM 50M WITH A WIND SPEED OF 8M/S
OVERSPEED PROTECTION	AUTOFURL
GENERATOR	PERMANENT MAGNET ALTERNATOR
TOWER TOP WEIGHT	88KG.
LATERAL THRUST	12.5kN at 50m/s

2000 Watts @ 9 m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Stainless steel components
- Lowest cost per watt



AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	180 kWh
11	5.0	18	360 kWh
13.4	6.0	21.6	540 kWh
18	8.0	28.8	1152 kWh
Weibul k = 2			

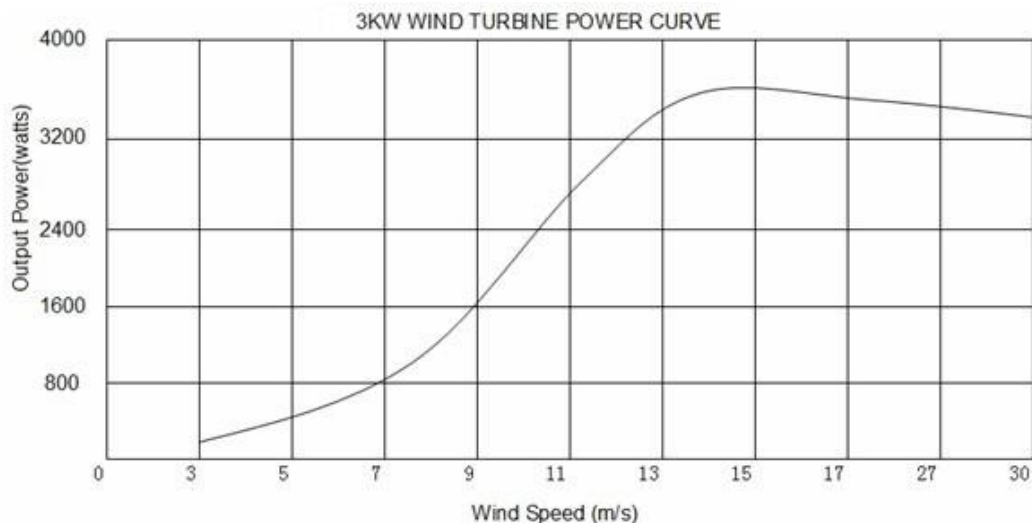
SPECIFICATION	
MODEL	ZH3KW
ROTOR DIAMETER, METERS/FEET	4.0/13.12
SWEPT AREA, SQM/ SQFT	12.6/135
NUMBER OF BLADES	3
BLADE MATERIAL	FIBRE GLASS REINFORCED
RATED POWER, WATTS	3000
@RATED WIND, M/S / MPH	10/22.3
PEAK POWER @ 12.5 M/S	3500
CUT-IN WIND, M/S / MPH	3/6.7
OUTPUT FORM	24VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)
BLADE PITCH CONTROL	NONE, FIXED PITCH
NOISE	45DB(A) FROM 50M WITH A WIND SPEED OF 8M/S
OVERSPEED PROTECTION	AUTOFURL
GENERATOR	PERMANENT MAGNET ALTERNATOR
TOWER TOP WEIGHT	105KG.
LATERAL THRUST	15.4KN at 50m/s

3000 Watts @ 10m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Stainless steel components
- Lowest cost per watt



AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	360 kWh
11	5.0	18	720 kWh
13.4	6.0	21.6	1080 kWh
18	8.0	28.8	2160 kWh
Weibul k = 2			

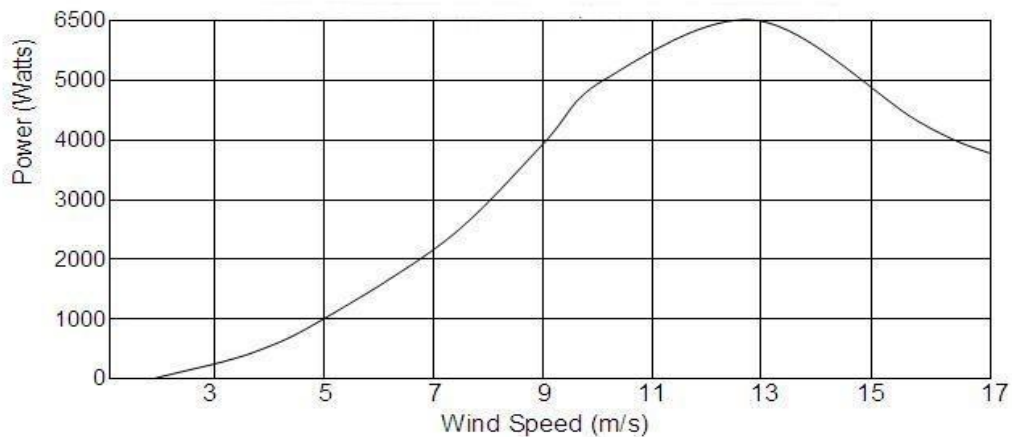
SPECIFICATION	
MODEL	ZH5KW
ROTOR DIAMETER, METERS/FEET	6.0/20
SWEPT AREA, SQM/ SQFT	28/314
NUMBER OF BLADES	3
BLADE MATERIAL	FIBRE GLASS REINFORCED
RATED POWER, WATTS	5000
@RATED WIND, M/S / MPH	10/22.3
PEAK POWER @ 12.5 M/S	6500
CUT-IN WIND, M/S / MPH	3/6.7
OUTPUT FORM	48VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)
BLADE PITCH CONTROL	NONE, FIXED PITCH
NOISE	55DB(A) FROM 50M WITH A WIND SPEED OF 8M/S
OVERSPEED PROTECTION	AUTOFURL
GENERATOR	PERMANENT MAGNET ALTERNATOR
TOWER TOP WEIGHT	327KG.
LATERAL THRUST	24kN at 50m/s

5000 Watts @ 10m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Stainless steel components
- Lowest cost per watt



10000 Watts @ 11m/s

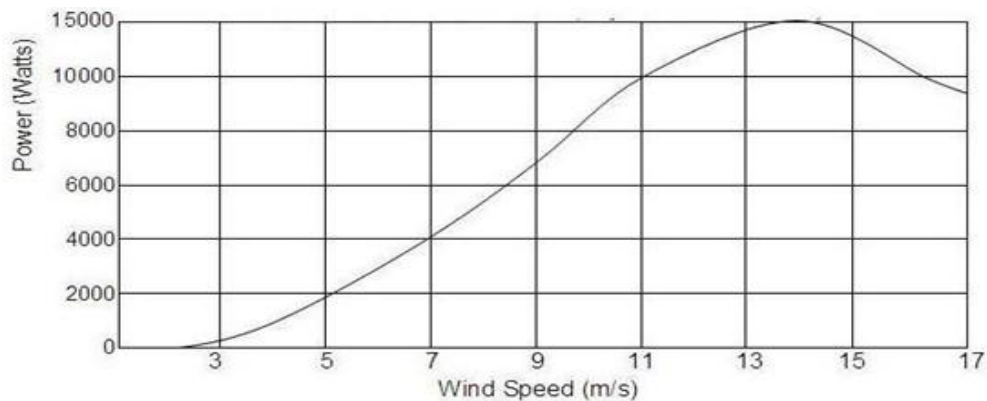
AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	720 kWh
11	5.0	18	1440 kWh
13.4	6.0	21.6	2160 kWh
18	8.0	28.8	3600 kWh
Weibul k = 2			

SPECIFICATION	
MODEL	ZH10KW
ROTOR DIAMETER, METERS/FEET	7.0/23
SWEPT AREA, SQM/ SQFT	38.5/415
NUMBER OF BLADES	3
BLADE MATERIAL	FIBRE GLASS REINFORCED
RATED POWER, WATTS	10000
@RATED WIND, M/S / MPH	11/24.6
PEAK POWER @ 12.5 M/S	15000
CUT-IN WIND, M/S / MPH	3/6.7
OUTPUT FORM	120VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)
BLADE PITCH CONTROL	NONE, FIXED PITCH
NOISE	60DB(A) FROM 50M WITH A WIND SPEED OF 8M/S
OVERSPEED PROTECTION	AUTOFURL
GENERATOR	PERMANENT MAGNET ALTERNATOR
TOWER TOP WEIGHT	980KG.
LATERAL THRUST	47kN at 50m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Stainless steel components
- Lowest cost per watt



AVERAGE WIND SPEED			
MPH	M/S	KMPH	MONTHLY GENERATION
9	4.0	14.4	2160 kWh
11	5.0	18	2880 kWh
13.4	6.0	21.6	4320 kWh
18	8.0	28.8	8640 kWh
			Weibul k = 2
SPECIFICATION			
MODEL	ZH10KW		
ROTOR DIAMETER, METERS/FEET	10.0/32.8		
SWEPT AREA, SQM/ SQFT	78.5/844.5		
NUMBER OF BLADES	3		
BLADE MATERIAL	FIBRE GLASS REINFORCED		
RATED POWER, WATTS	20000		
@RATED WIND, M/S / MPH	11/24.6		
PEAK POWER @ 12.5 M/S	30000		
CUT-IN WIND, M/S / MPH	3/6.7		
OUTPUT FORM	240VDC NOMINAL (HIGHER VOLTAGE OPTIONAL)		
BLADE PITCH CONTROL	NONE, FIXED PITCH		
NOISE	60DB(A) FROM 50M WITH A WIND SPEED OF 8M/S		
OVERSPEED PROTECTION	AUTOFURL		
GENERATOR	PERMANENT MAGNET ALTERNATOR		
TOWER TOP WEIGHT	1260KG.		
LATERAL THRUST	96kN at 50m/s		

20000 Watts @ 11m/s



Features

- Whisper quiet
- Neo magnets for long life
- High output for low winds
- Unique angle governing
- Sustained output in high winds
- Ruggedized body frame
- Lowest cost per watt

