WIND TURBINES 300^{i} (1kW)

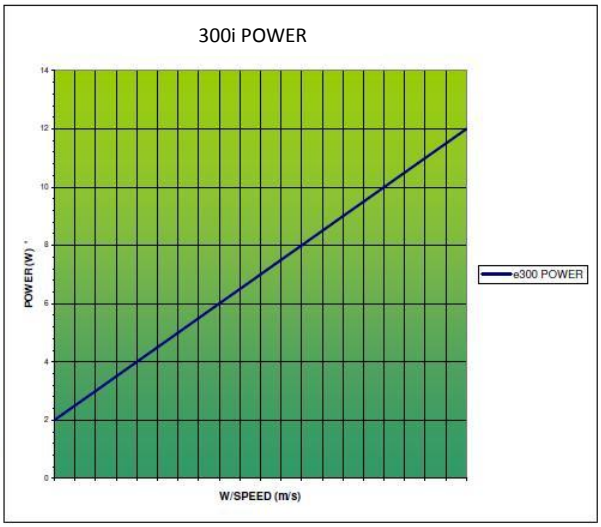
Available in 12, 24, 48, 110 and 200 VDC

- **ALL SPECIFIC ELECTRICAL NEEDS**
- **Charging batteries**
- **Power water pumps**
- **Use for resistance heating**
- **Supply the national grid**
- **Boost hybrid systems for increased energy efficiency**

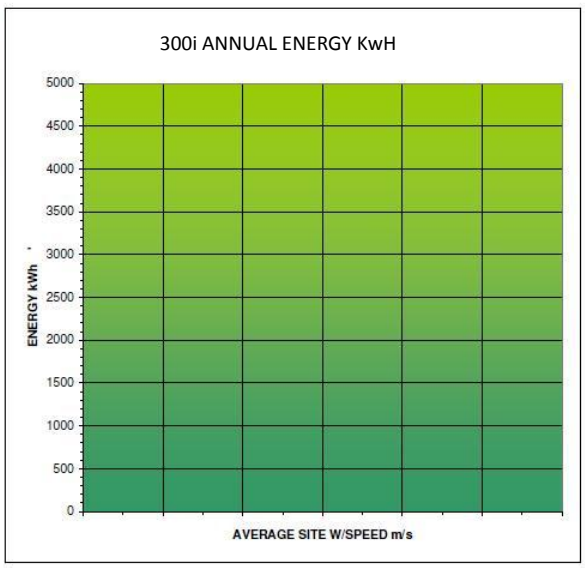
The e300^{i} is the next generation of small wind turbine. It is a low starting machine allowing it to generate electricity at relatively low wind speeds. The high performance three blade rotor with pitch control powers a twin axial flux permanent magnet brushless alternator, with good heat management. The e300^{i} maintains its rated output in excess wind speeds, optimising the potential power output and energy yield. More usable power generated, stored and used. The e300^{i} powers telecoms sites around the world.

300i PERFORMANCE GRAPHS

NEW EDP 1kW 3 BLADE ROTOR	
Jan 08	
2	6.7
2.5	9.8
3	26.6
3.5	53.4
4	92
4.5	142
5	209
5.5	268
6	329
6.5	409
7	480
7.5	553
8	620
8.5	700
9	790
9.5	870
10	950
10.5	990
11	1020
11.5	1040
12	1050



W/SPEED m/s	INLAND WB=2 ANNUAL
2	158
3	612
4	1368
5	2290
6	3238
7	4108
8	4836



Technical Specifications 300^{i} (1kW)

Peak Power Output	Wind speed >11m/s	1150W
Power Output 1000W	Wind speed of 11m/s	1000W
Rotational Speed	Rotor rpm at output of 1000W	650rpm
Cut in Wind Speed	Minimum wind speed for charging Output	2.5m/s
Cut out Wind Speed	Maximum wind speed	N/A
Rotor Diameter	Diameter of swept area	3.0m
Swept Area		7sq m
Number of Blades	Full aerofoil section	3
Blade Type	Moulded glass fibre epoxy resin	Aerofoil
Lateral Thrust	Horizontal force vector at 12m/s	800N
Passive Speed Control	Passive blade pitching	750rpm
Tower Top Mass	Total wind turbine mass	75kg
Rated Sound Level	Sound emission at 5m/s and 60m	<40dB
Protection	Protected from moisture and dust	IP55
Generator Type	Polyphase brushless permanent magnet	PM 12ph
Output Voltage	Standardised DC output	12, 24, 48, 110, 200Vdc
Warranty	Terms and conditions apply	2 years (extendable)
Routine Maintenance	Subject to prevailing wind power class	Periodic visual inspection

Annual Energy Output:

Wind speed (m/s)	48V and 200V
2	158
3 *(Johannesburg)*	612
4 *(Durban)*	1368
5 *(CapeTown)*	2290
6	3238
7 *(Pilgrim'sRest)*	4108
8	4836

Specifications may vary with continuing development and innovation

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