

# Renewable Energy Devices

For renewable devices, a very noble, green earth endeavor.

## BARAMDORIE-10 kW Wind Turbine System

Low Wind, Sound Technology,,,

|   |  |
|---|--|
| Model                                       | BARAMDORIE   |
| Rated Output                                | 10 kW  |
| Rated Wind Speed                            | 9 m/s  |
| Cut-in Wind Speed                           | 2.5 m/s  |
| Cut-Out Wind Speed                          | 15 m/s   |
| SWT Class                                   | III  |
| <b>Rotor Blade-UpWind</b>                   |  |
| Number of Blade                             | 3  |
| Direction of rotation                       | Clockwise  |
| Rotor Diameter                              | 8.8 m(Blade Length - 4.3m)   |
| Swept Area                                  | 60.8 $m^2$   |
| Blade Material                              | Fiberglass-reinforced epoxy  |
| Airfoil                                     | R-1235   |
| Tip Speed Ratio                             | 6.5  |
| Rated Speed                                 | 120  |
| Weight per Blade                            | 30 kg  |
| Over speed Control                          | Side Furling (Offset/Mechanical Tail)<br>Electric Breaker(E/B) + Short Circuit Breaker |
| Yawing System                               | Passive regulation by tail vane  |
| <b>PM Generator &amp; Grid Tie Inverter</b> |  |
| Generator                                   | Permanent Magnet AC Generator  |
| Output Voltage                              | ~ 500 Vac  |
| PMSG Frequency                              | ~ 40 Hz  |
| Grid Tie Inverter                           | 3 $\phi$ , 380Vac-60Hz, 12kW   |
| <b>Tower</b>                                |  |
| Tower height                                | 15~18 m  |

SEOLTECH CO.,LTD.

100-186 Calsan-Dong, Dalseo-Ku, Daegu Korea 704-900

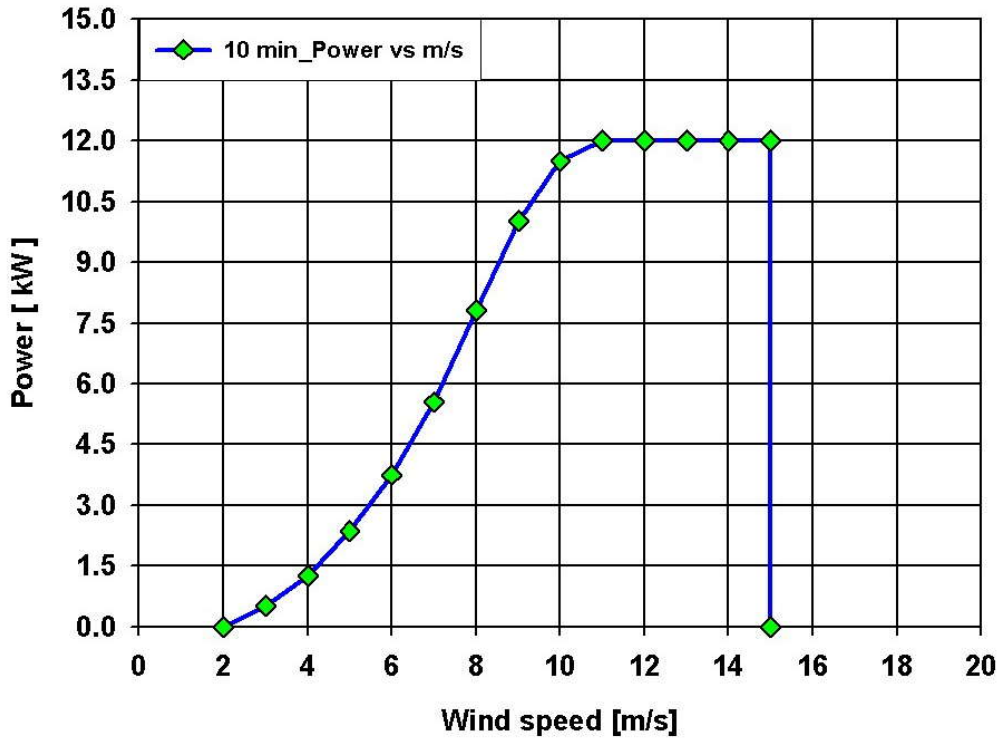
Tel : 82.53.580.7400 Fax : 82.53.580.7499

E-mail: rosa@seoltech.com & skywindearth@skywindearth.com

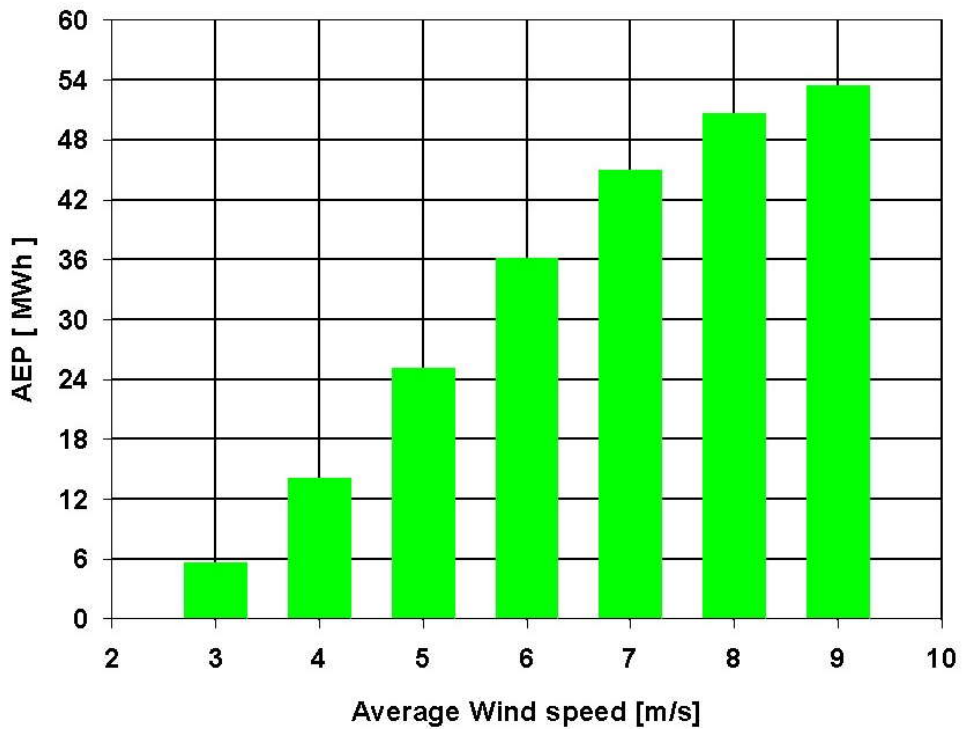


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## BRAMDORIE-Annual Energy Production(AEP)



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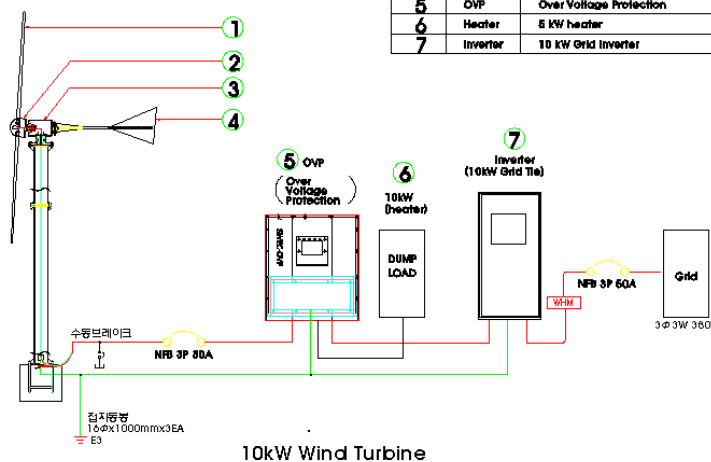


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| SYMBOL | NAME      | Description             |
|--------|-----------|-------------------------|
| 1      | Blade     | 3 Blade                 |
| 2      | Generator | 10 KW PMG               |
| 3      | Yawing    | Slide Furling System    |
| 4      | Tail      | Tail                    |
| 5      | OVP       | Over Voltage Protection |
| 6      | Heater    | 5 KW heater             |
| 7      | Inverter  | 10 KW Grid Inverter     |



| NO | REV | DATE        | DESCRIPTION                   | BY | CHK | APP |
|----|-----|-------------|-------------------------------|----|-----|-----|
| 1  | 1   | 2011. 2. 10 | 10kW Wind Turbine             |    |     |     |
| 2  | 2   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 3  | 3   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 4  | 4   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 5  | 5   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 6  | 6   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 7  | 7   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 8  | 8   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 9  | 9   | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |
| 10 | 10  | 2011. 2. 10 | 10kW Grid Tie Inverter System |    |     |     |

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인증번호: WT-SWS-1-0010



## 신·재생에너지 설비 인증서

New & Renewable Energy

1. 업체명(사업자등록번호) : ㈜설텍(5038174922)
2. 사무소 소재지 : 대구광역시 달서구 갈산동 100-186 100-186
3. 공장 소재지 : 대구광역시 달서구 갈산동 100-186
4. 인증 신·재생에너지 설비

### 제품의 특징

시스템(형태):수평축형, 시스템(방식):계통연계형, 발전기(정격출력) (W):12000, 출력:10k W(380V, 16.5A), 회전차(개수) (개):3, 직경 (m):8.8, 면적 (㎡):60.8, 철탑(형식):원형관형, 무게 (kg):2140, 높이 (m):12

인증대상품목 : 소형풍력발전 시스템  
 모델명 : 바람도리(BARAMDORIE)  
 적용기준 : WT 101 : 2012

2015년06월19일

에너지관리공단 부설  
 신재생에너지센터소



◇제발급이력

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\*이 모델의 인증서 유효기간은 2018-06-18 일입니다.

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ZERTIFIKAT | CERTIFICATE | CERTIFICADO | CERTIFICAT | شهادة | 證書 | 인증서



**TÜV AUSTRIA CERT GMBH**  
Certification Body



## CERTIFICATE OF CONFORMITY

Reg.- No.: TA 380 12 1728

|                          |                            |            |  |
|--------------------------|----------------------------|------------|--|
| Product:                 | Permanent Magnet Generator | Applicant: | SEOLTECH Co., Ltd.<br>100-186, Galsan Dong<br>Dalseo-gu, Daegu<br>704-900, Korea |
| Type:                    | SWEG10K-I, SWEG15K-I       |            |  |
| Description:             |                            |            |  |
| Certification reference: | EN 60034-1:2004            |            |  |
| Comments:                |                            |            |  |
| Test report:             | BWS-12-SC-058              |            |  |

The above mentioned product complies with the requirements of the above standards. It fulfills the requirements of Directive 2006/95/EC.

2012-05-31

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Date of issue




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Certification representative



After preparation of the necessary technical documentation as well as the conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed.

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TÜV AUSTRIA CERT GMBH  
A-1015 Wien, Krugerstrafie 16  
[www.tuv.at](http://www.tuv.at)

Tel: +43 (0)1 514 07- 6062  
Fax: +43 (0)1 514 07- 6065  
e-mail: [ps@tuv.at](mailto:ps@tuv.at)

CFM-TAC-MsdA-006, Rev.02

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