



E-3

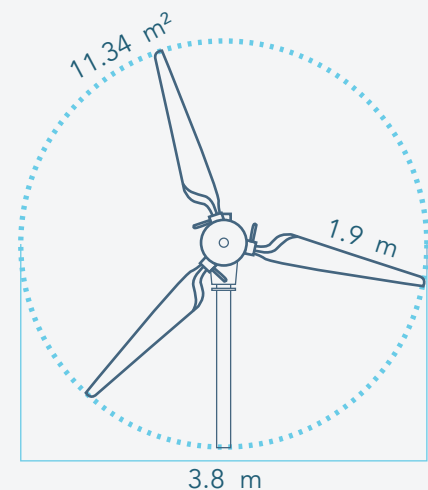
DATA SHEET

The E-3 is capable of charging over 1 million smart phones each year.



| | | |
|-------------------|----------------------|--|
| GENERATOR | Type | Permanent Magnet |
| | Maximum Power | 3 kW |
| | Rated Power | 1.9 kW |
| ROTOR | Configuration | Horizontal Axis |
| | No. of Blades | 3 |
| | Blade Material | Glass fibre |
| | Blade Length | 1.9 m |
| | Rotor Diameter | 3.8 m |
| | Swept Area | 11.34 m ² |
| | Nominal Rotor Speed | 250 rpm |
| WIND | Pitch/Yaw | Upwind passive system with steering rudder |
| | Cut-In Speed | 2 m/s |
| | Rated Wind Speed | 11 m/s |
| | Cut-Out Speed | 60 m/s |
| | Survival Speed | 70 m/s |
| WEIGHTS | Nacelle/Rotor | 125 kg |
| TOWERS | Lattice | 6 – 27 m |
| | Monopole | 6 – 27 m |
| | Tilt-Up | 6 – 27 m |
| DESIGN PARAMETERS | Turbine Design Class | IEC 61400-2 Class I |
| | Temperature Range | -20° to 50°C |
| | Lifespan & Servicing | 20 years, subject to regular maintenance |

TECHNICAL PROFILE



CLASS I

PASSIVE REGULATION



24 V DC

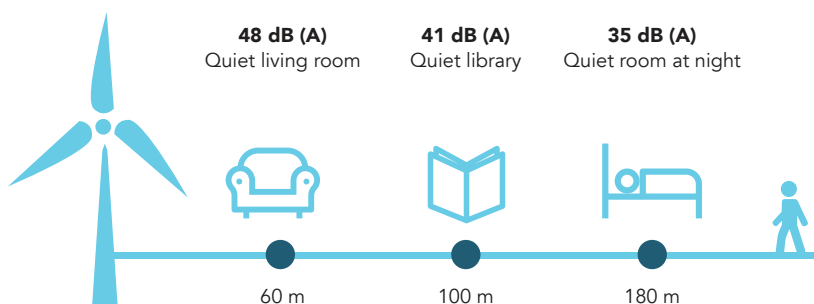


48 V DC



GRID

NOISE



Approx. Data



SAFETY



- Base Level: Electronic control system activates mechanical brake with shaft lock.
- Second Level: Passive blade pitch control, with 45° of movement and 2 reaction speeds, limits power output.
- Third Level: Electronic control system activates electromagnetic induction brakes.

DATA INPUT & MANAGEMENT



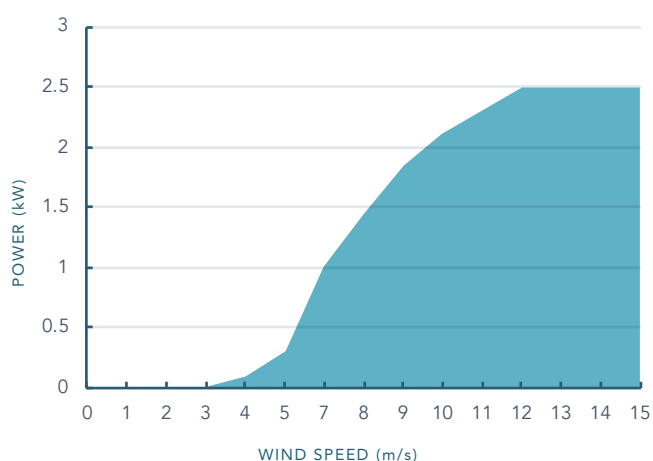
- Remote Control: Allows the remote customization of the wind turbine in order for Ryse to provide optimum performance in every site.
- Storm Detection: Intelligent storm detection algorithm and automatic safety lock protect the turbine in the event of dangerous gusts/hurricane weather.
- LCD display in control box. Can output to local PC or be monitored remotely via the internet.

CONSTRUCTION & MAINTENANCE



- Anti-Corrosive Blades: The blades and nacelle are treated with epoxy paint and hermetically sealed. This gives corrosion and saline protection, making the turbine ideal for island, coastal or desert deployments.
- Ryse service contract available.
- Online store for easy purchase of spare parts & equipment: ryse.energy/shop

POWER CURVE



ENERGY OUTPUT

| Annual Mean Wind Speed (m/s) | Estimated Annual Output (kWh) |
|------------------------------|-------------------------------|
| 2 | 375 |
| 3 | 1,250 |
| 4 | 2,700 |
| 5 | 4,450 |
| 6 | 6,300 |
| 7 | 8,160 |
| 8 | 9,800 |
| 9 | 11,100 |
| 10 | 12,100 |

