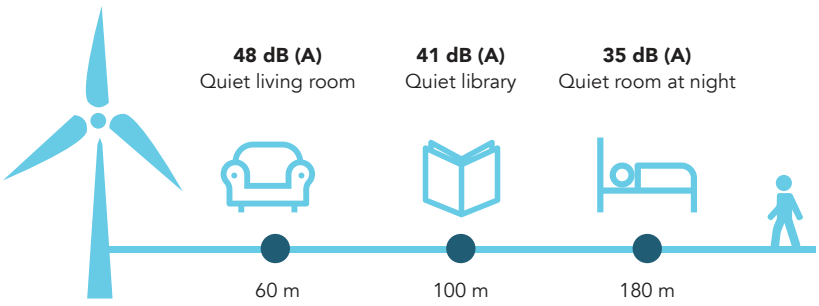
E-5

DATA SHEET

The E-5 is capable of off-setting greenhouse gas emissions from 38,902 miles driven by a passenger vehicle each year.

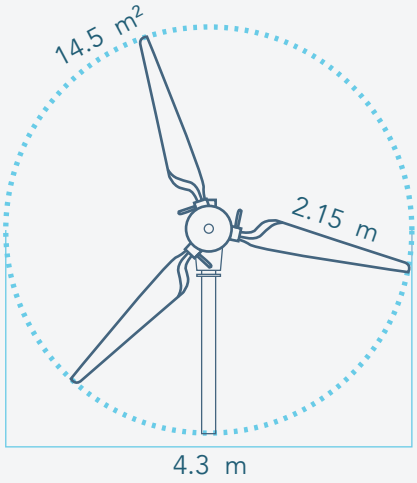
GENERATOR	Type	Permanent Magnet
	Maximum Power	5.5 kW
	Rated Power	4 kW
ROTOR	Configuration	Horizontal Axis
	No. of Blades	3
	Blade Material	Glass fibre
	Blade Length	2.15 m
	Rotor Diameter	4.3 m
	Swept Area	14.5 m^2
	Nominal Rotor Speed	250 rpm
	Pitch/Yaw	Upwind passive system with steering rudder
WIND	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	165 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

NOISE



Approx. Data

TECHNICAL PROFILE



CLASS I

PASSIVE REGULATION

48 V DC

GRID

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.

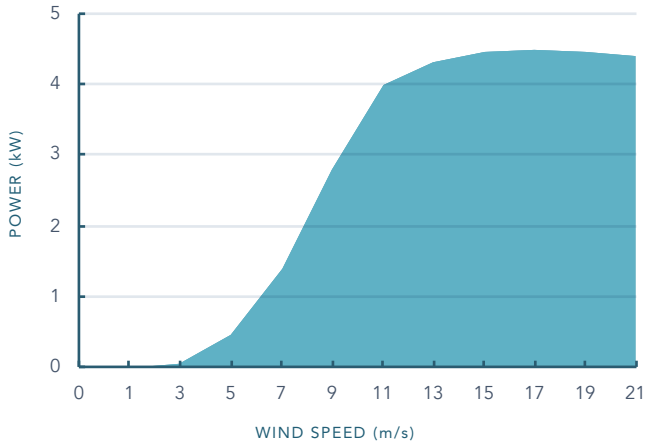
DATA INPUT & MANAGEMENT

- 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	290
3	1,900
4	3,900
5	6,900
6	10,000
7	14,300
8	17,700
9	20,000
10	22,500