



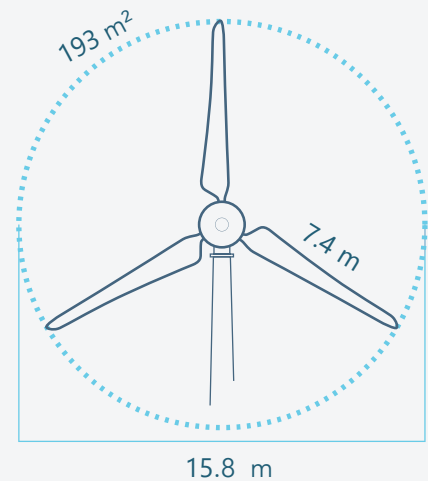
E-60

DATA SHEET



GENERATOR	Type	Permanent Magnet
	Maximum Power	70 kW
	Rated Power	60 kW
ROTOR	Configuration	Horizontal Axis
	No. of Blades	3
	Blade Material	Glass fibre
	Blade Length	7.4 m
	Rotor Diameter	15.8 m
	Swept Area	193 m ²
	Nominal Rotor Speed	120 rpm
WIND	Pitch/Yaw	Downwind passive pitch
	Cut-In Speed	2 m/s
	Rated Wind Speed	11 m/s
	Cut-Out Speed	30 m/s
	Survival Speed	59.5 m/s
WEIGHTS	Nacelle/Rotor	4,500 kg
TOWERS	Lattice	18 – 36 m
	Monopole	18 – 27 m
	Tilt-Up	18 – 27 m
DESIGN PARAMETERS	Turbine Design Class	IEC 61400-2 Class II
	Temperature Range	-20° to 50°C
	Lifespan & Servicing	20 years, subject to regular maintenance

TECHNICAL PROFILE



CLASS II

PASSIVE REGULATION



SAFETY



- Base Level: Active blade pitch control, with 90° of movement, limits power output and can put blades in a total stall position.
- Second Level: Electronic control system activates mechanical brake with shaft lock and electromagnetic induction brake.
- Third Level: Passive springs deploy, putting the turbine blades in a stall position, spoiling the rotor aerodynamics and subsequently its ability to rotate.

DATA INPUT & MANAGEMENT



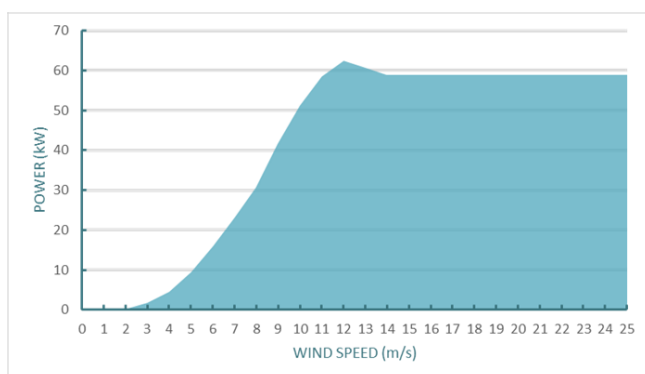
- Remote Control: Allows the remote customization of the wind turbine in order for Ryse to provide optimum performance in every site.
- Storm Detection: Intelligent storm detection algorithm and automatic safety lock protect the turbine in the event of dangerous gusts/hurricane weather.
- LCD display 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.

POWER CURVE*



ENERGY OUTPUT*

Annual Mean Wind Speed (m/s)	Estimated Annual Output (kWh)
5.0	119,121
5.5	145,580
6.0	171,886
6.5	202,278
7.0	221,466
7.5	243,979
8.0	264,856

* Indicative power curve and estimated energy output. Based on ongoing testing.