



G-11

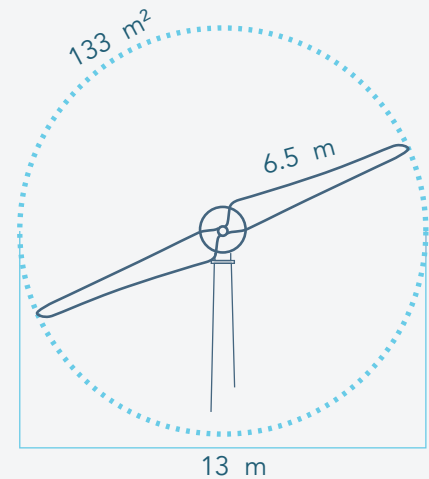
DATA SHEET

The G-11 is capable of displacing greenhouse gas emissions from 15,000 litres of fuel each year.



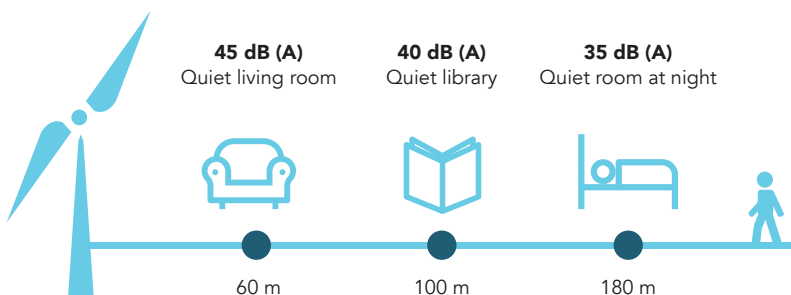
GENERATOR	Type	Induction
	Maximum Power	11 kW
	Rated Power	11 kW
ROTOR	Configuration	Horizontal Axis
	No. of Blades	2
	Blade Material	Glass fibre
	Blade Length	6.5 m
	Rotor Diameter	13 m
	Swept Area	133 m ²
	Nominal Rotor Speed	56 rpm
	Pitch/Yaw	Downwind fixed pitch with passive yaw
WIND	Cut-In Speed	3 m/s
	Rated Wind Speed	11 m/s
	Cut-Out Speed	25 m/s
	Survival Speed	52.5 m/s
WEIGHTS	Hub	900 kg
TOWERS	Lattice	15 – 36 m
	Monopole	18 – 27 m
	Tilt-Up	18 – 27 m
DESIGN PARAMETERS	Turbine Design Class	IEC 61400-2 Class III
	Temperature Range	-20° to 50°C
	Lifespan & Servicing	20 years, subject to regular maintenance

TECHNICAL PROFILE



CLASS III
PASSIVE REGULATION

NOISE





SAFETY



- Base Level: Passive stall of blades limits power output.
- Second Level: Electronic control system activates mechanical brake.
- Third Level: Passive centrifugally activated aerodynamic brakes, concealed in the rotor tips, release, spoiling the rotor aerodynamics and subsequently its ability to rotate.

DATA INPUT & MANAGEMENT



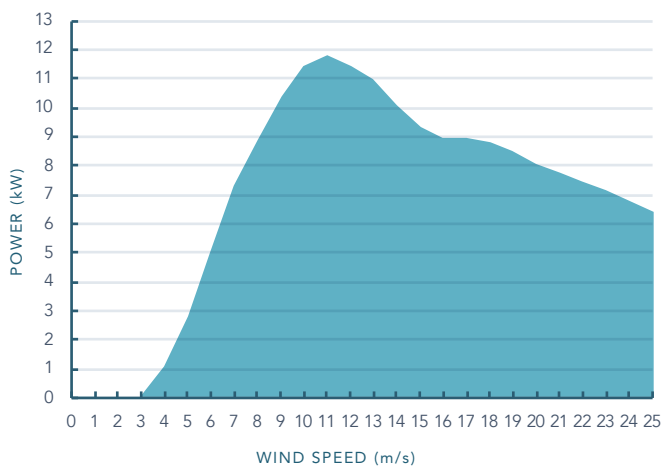
- Integrated microprocessor with multiple sensor inputs: wind speed, power, voltages, currents and phase, rpm, vibration and temperature alerts.
- LCD display in control box. Can output to local PC or be monitored remotely via the internet.
- Remote Monitoring: Allows remote monitoring of the wind turbine in order for Ryse to ensure the turbine is operating at its peak performance.

CONSTRUCTION & MAINTENANCE



- Limited plant requirement for installation.
- The bottom of the tower is bolted onto a reinforced concrete base with dimensions 5.2 x 5.2 x 0.6 m. This is set in a 1 m deep hole with a 0.4 m layer of hard-packed earth on top.
- Online store for easy purchase of spare parts & equipment: ryse.energy/shop
- Ryse service contract available.

POWER CURVE



ENERGY OUTPUT

Annual Mean Wind Speed (m/s)	Estimated Annual Output (kWh)
4.0	16,220
4.5	21,861
5.0	27,502
5.5	32,731
6.0	37,959
6.5	42,243
7.0	46,527
7.5	49,655

MCS APPROVED DATA