



N-55

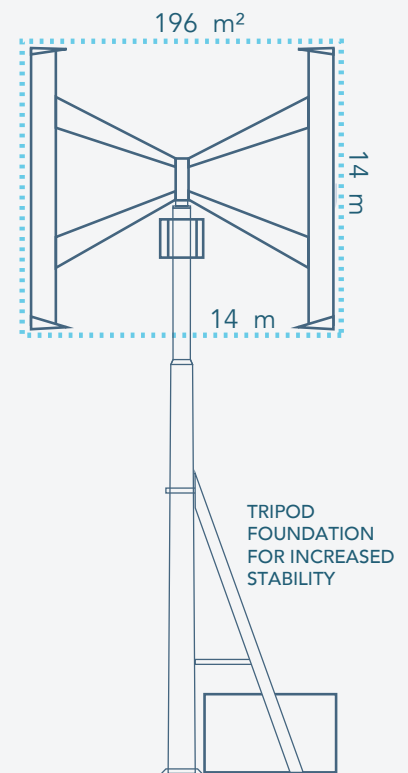
DATA SHEET

The N-55 is capable of displacing greenhouse gas emissions from 97,000 kg worth of coal burned each year.



GENERATOR	Type	Induction
	Maximum Power	65 kW
	Rated Power	55 kW
ROTOR	Configuration	Vertical Axis
	No. of Blades	3 or 5
	Blade Material	Glass fibre
	Blade Length	14 m
	Rotor Diameter	14 m
	Swept Area	196 m ²
	Max Rotor Speed	34 rpm
	Pitch/Yaw	Fixed
WIND	Cut-In Speed	3.5 m/s
	Rated Wind Speed	11 m/s
	Cut-Out Speed	25 m/s (Variable)
	Survival Speed	59.5 m/s
WEIGHTS	Hub	8,200 kg
	Rotor Assembly	5,000 kg
	Tower	19,500 kg
TOWERS	Monopole Tripod	23 - 30 m
DESIGN PARAMETERS	Turbine Design Class	IEC 61400-2 Class II
	Temperature Range	-20° to 55°C
	Lifespan & Servicing	20 years, subject to regular maintenance

TECHNICAL PROFILE



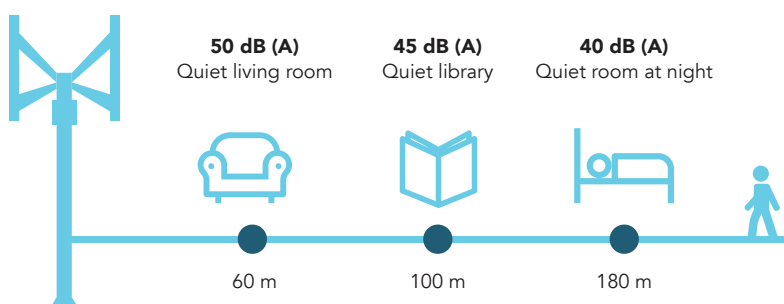
ENERGY GENERATION AND CONTROL LOCATED AT GROUND LEVEL IN SECURE CONTAINER



CLASS II

ACTIVE REGULATION

NOISE



Approx. Data



SAFETY



- Base Level: Regenerative braking slows the turbine rotor down while still harvesting energy.
- Second Level: Electronic control system activates mechanical brake.
- Third Level: Quad pneumatic, fail-safe mechanical brakes deploy, bringing the turbine to rest in as little as 10 seconds.

DATA INPUT & MANAGEMENT



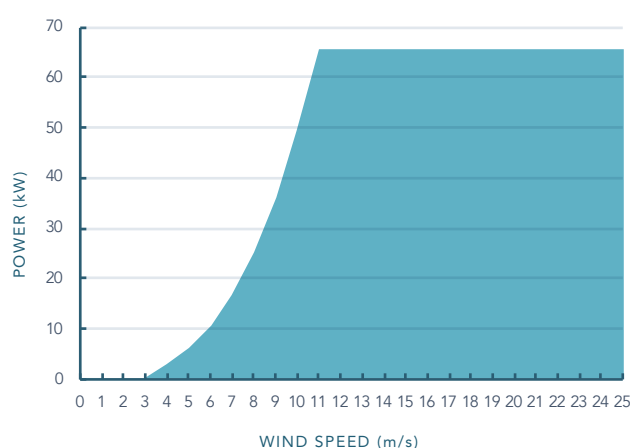
- Integrated microprocessor with multiple sensor inputs: wind speed, power, voltages, currents and phase, rpm, vibration and temperature alerts.
- LCD display in control box. Can output to local PC or be monitored remotely via the internet.
- Remote Monitoring: Allows remote monitoring of the wind turbine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

CONSTRUCTION & MAINTENANCE



- Limited plant requirement for installation.
- Majority of major components at ground level, simplifying installation, operation and maintenance.
- Environmentally friendly screw pile foundation instead of a concrete foundation.
- Screw pile foundation offers quick relocation and re-deployment.
- Ryse service contract available.

POWER CURVE



ENERGY OUTPUT

Annual Mean Wind Speed (m/s)	Estimated Annual Output (kWh)
5.0	92,739
5.5	119,676
6.0	147,690
6.5	175,776
7.0	203,178
7.5	229,348
8.0	253,912
8.5	276,628