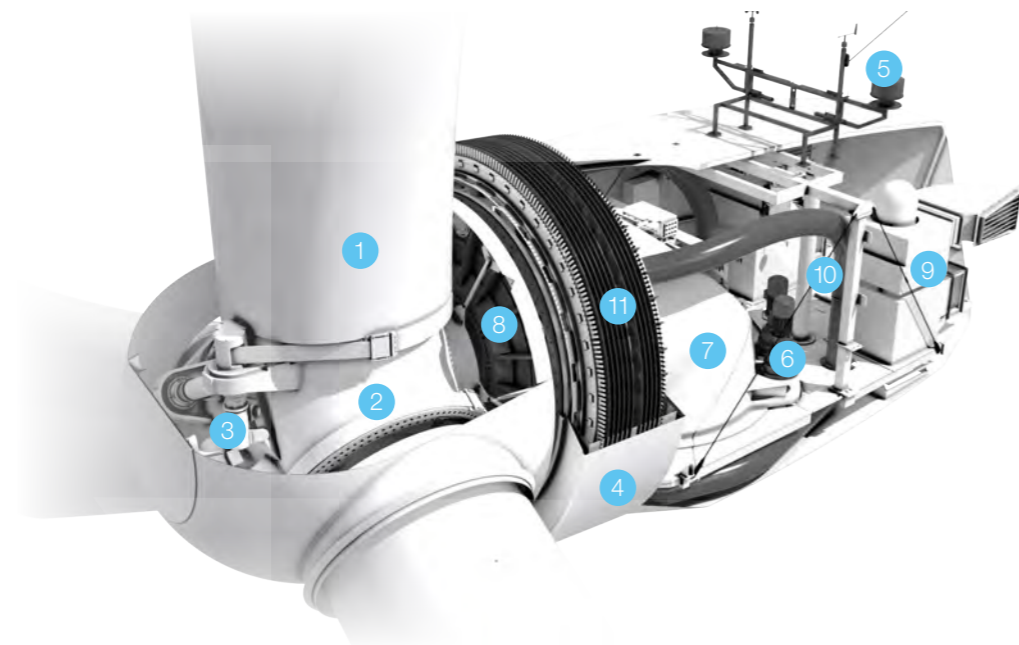


2.5 MW

PMDD WIND TURBINE



2.5 MW PMDD WIND TURBINE



1. Blade
2. Hub
3. Pitch System
4. Rotor
5. Wind Measurement Equipment
6. Yaw System
7. Nacelle Base
8. Main Bearing
9. Generator Cooling System (Heat Exchanger)
10. Hoist
11. Generator Stator

GOLDWIND 2.5MW PMDD WIND TURBINE KEY FEATURES

Platform Evolution

- 20+ years of operational experience from 10,000+ Permanent Magnet Direct Drive (PMDD) wind turbines
- Evolution of the successful GW1500 platform with enhanced architectural features

High Efficiency

- Permanent Magnet Synchronous Generator (PMSG) eliminates excitation losses
- The absence of gearbox eliminates losses from ancillary systems such as lubricant distribution and thermal management

High Reliability

- The gearless drivetrain design eliminates the possibility of gear failure during the operational life of the turbine
- Maintenance-free design of the toothed belt pitch drive system simplifies pitch system maintenance requirements
- PMSG does not require high maintenance slip rings for conducting power

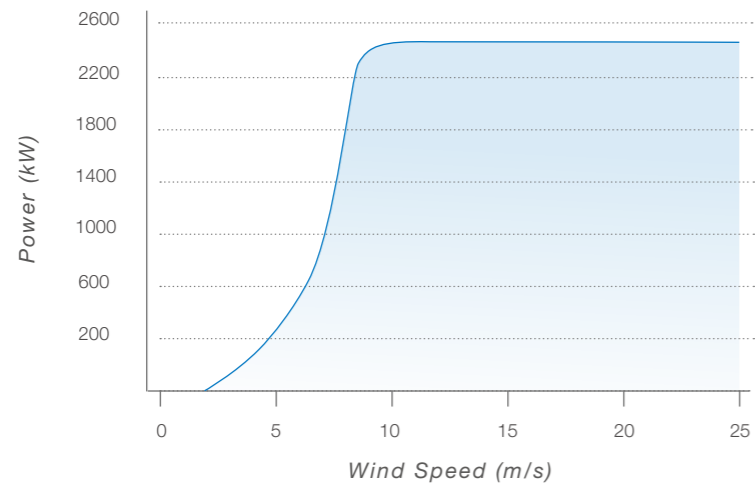
Highly Adaptable

- Grid Adaptability: Excellent zero, low and high voltage ride through capability and compliant with associated standard's across the globe
- Maintenance Adaptability: Dual circuit design of generator and converter enables partial operation when one circuit is compromised
- Environment Adaptability: Flexible operation modes enable adaptation to extreme environmental conditions such as high and low temperature, noise constraints and challenging wind conditions
- Construction Adaptability: Individual blade assembly to conserve site space constraints

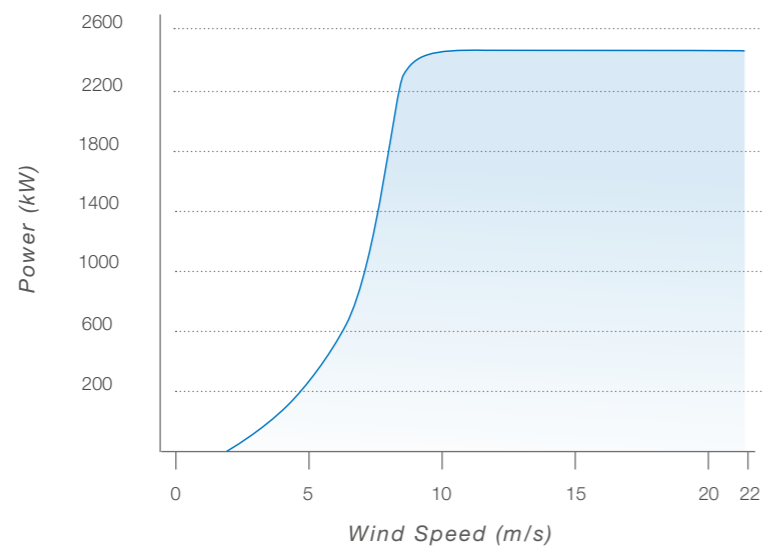
DYNAMIC POWER CURVE

GW 109/2500

Air Density: 1.225kg/m³



GW 121/2500



TECHNICAL SPECIFICATIONS

		2.5MW	
Item	Unit	Specifications	
Model		GW 109/2500	GW 121/2500
Parameters			
Rated Power	kW	2500	
Wind Class		IEC IIA	IEC IIIB
Cut-in Wind Speed	m/s	3	
Rated Wind Speed	m/s	10.2	9.3
Cut-out Wind Speed	m/s	25	22
Designed Service Life	Year	20	
Operating Temperature Range	°C	-30~ +40	
Survival Temperature Range	°C	-40~ +50	
Rotor			
Rotor Diameter	m	109	121
Rotor Swept Area	m ²	9076/9413	11595
Generator			
Generator Type		Permanent Magnet Synchronous Generator (PMSG)	
Rated Frequency	Hz	50/60	
Rated Output Voltage	V	690	
Rated Rotational Speed	rpm	13.5	13.5
Converter			
Converter Type		Full Power Conversion	
Power Factor Regulation Range		Capacitive 0.95~inductive 0.95, dynamically adjustable	
Rated Frequency	Hz	50/60	
Rated Output Voltage	V	690	
Brake System			
Aerodynamic Brake System		Blade pitch triple-redundant	
Mechanical Brake System		Generator Brake (for maintenance)	
Yaw System			
Type/Design		Electric Motor drive/Four Planetary Stages for Speed Reduction	
Yaw Brake		Hydraulic Brake	
Control System and Lightning Protection			
Type		PLC Control System	
Lightning Protection Standard		Compliant with IEC 61400/24-2002, IEC 62305-2006, and in conformance with the GL Standards for the Certification of Wind Turbines.	
Ground resistance	Ω	≤ 4	
Tower			
Type		Conical Steel Tower	
Hub height	m	80/90	90/120
Weight			
Rotor (excluding blades)	t	28.6	28.6
Nacelle	t	29	29
Generator	t	55	55

INNOVATING FOR
A BRIGHTER FUTURE



GOLDWIND



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