



# GW150-3.0MW

## PMDD Smart Wind Turbine

### Turbine Features



#### Lightweight design

Novel design and compact structure  
Small size and light weight facilitate transportation and installation



#### Outstanding energy production at low wind speeds

Wide rotor speed range for grid connection and high conversion efficiency at low wind speeds



#### High reliability

No worry of gearbox failure  
Main bearing designed with good adaptability to ultralow wind speeds



#### Low O&M cost

Maintenance-free toothed belt design  
No slip ring and carbon brush maintenance cost  
No gearbox oil inspection and maintenance cost



#### Full power converter and superior grid connection performance

Excellent fault ride-through capability and possess zero voltage ride-through capability  
Capable of reactive power output, reducing the concentration of reactive compensation investment



Please scan QR code for more information

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### Operating parameters

Rated power	MW	3
Wind turbine class	IEC	S
Cut-in wind speed	m/s	2.5
Rated wind speed (static power curve, standard air density)	m/s	9
Cut-out wind speed	m/s	18
Design service life	Year	≥ 20
Operating temperature	°C	- 30°C ~ +35(40)°C
Survival temperature	°C	- 40°C ~ +50°C

### Rotor system

Rotor diameter	m	150
Swept area	m <sup>2</sup>	17671

### Generator

Type	\	Permanent magnet synchronous generator
Rated voltage	V	760

### Converter

Type	\	Full power converter
Power factor regulation range	\	Capacitive 0.95 ~ inductive 0.95
Rated output frequency	Hz	50/60
Rated output voltage	V	690

### Brake system

Aerodynamic brake system	\	Aerodynamic brake via feathering
Mechanical brake system	\	Generator hydraulic brake (for maintenance)

### Yaw system

Type/Design	\	Motor-driven/Four-stage planetary gear reducer
Yaw brake	\	Hydraulic brake

### Control system and lightning protection

Type	\	PLC control system
Lightning protection design standard	\	IEC61400/24-2010, IEC62305-2006 standards GL certification standards
Lightning protection measures	\	Direct lightning strike protection and lightning electromagnetic impulse protection
Wind turbine ground resistance	Ω	The power frequency grounding resistance R for each Wind Turbine should be less than 4 Ω

### Tower

Tower type	\	Steel tower
Hub height	m	95/100/140
Tower type	\	Concrete-steel hybrid tower
Hub height	m	120/140

### Weight

Blade	t /p	16.7
Rotor (excluding blades)	t	37.8
Nacelle	t	27.1
Generator	t	67

### Dimension

Blade length	m	73.2
Rotor (excluding blades)	m	Φ4.7, 4.7 high
Nacelle	m	6.9×4.5×5.8
Generator	m	Φ5.0×1.6, 3.7 shaft length

1. Blade
2. Pitch system
3. Hub
4. Generator rotor
5. Generator stator
6. Generator Switch Cabinet
7. Yaw system
8. Wind sensors
9. Generator cooling system
10. Nacelle cover
11. Nacelle base
12. Tower

