MODEL: P 62-1000 Wind Turbine

TECHNICAL SALES SPECIFICATIONS

GENERAL	
Type	Horizontal Axis, Upwind
Rated Power	1000kW
Model	P62-1000
Design Class	IEC SWT CLASS IIA
Design Standard	IEC 61400-2
Cut-in Speed	2.5m/s (5.6 mph)
Rated Speed	12m/s (26.8 mph)
Cut-out Speed	25m/s (55.9 mph)
PITCH SYSTEM	
Type	Variable Pitch
Drive	AC
HUB	
Type	High Strength Aluminum Alloy
Machine Frame	
Type	Steel
GENERATOR	
Type	Permanent Magnet
Rated Power	1000kW, 3 Phase
Voltage	460VAC
Cooling	Air Cooled
POWER CONVERTER	Variable Frequency Drive
Type	AC/DC/AC Inverter
Phase	Three (3)
Voltage	460/690VAC
Frequency	60Hz or 50Hz
YAW SYSTEM	
Type	Active
Drive	AC
Brake	Electric
Yaw Bearing	Ball Bearing
DESIGN CLASS	
IEC CLASS II STANDARD	Air density 1.225kg/m³, average annual wind below 8.5 m/s, 50yr peak gust below 59.5 m/s

ROTOR		
Diameter	62m (203.4ft)	
Material	Fiberglass/Resin	
Operation RPM	TBD	
DRIVE TRAIN		
Type	Direct Drive	
BRAKING SYSTEMS		
Emergency Back Up Speed Reg	Regenative Brake	
Loss-Grid Power/DC Buss overvoltage	Dynamic Resistive Brake	
Emergency Shutdown/ Parking	Dual Caliper Disc Brake	
CONTROLLER		
Processor	PLC	
User Interface	HMI	
Communications	Ethernet	
Monitoring System	Web Based	
TOWER		
Type	Tubular	
Hub Height	60m (198ft)	70m (230ft)
Number of Sections	5	5
Hydraulic Tilt-Up	Optional	
ENVIROMENTAL LIMITS		
Survival Wind Speed	59 m/s (132 mph)	
TEMPERATURE CONDITIONS		
Standard Operation	-10°C to 40°C (14°F to 104°F)	
Extreme Temperature Range	-25°C to 50°C (-13°F to 122°F)	
WEIGHT		
Nacelle	55,765 kg (122,905 lbs)	
NOISE PERFORMANCE		
Apparent Noise Level	50- 55 db at 30m (100ft)	
SPEED REGULATION		
Generator	Torque Control from Drive	
LIGHTNING PROTECTION		
Standard	Surge Suppression on Generator	