

Technical Specification

TURBINE	Twin Head Horizontal Crossflow Turbine
POWER REGULATION	Horizontal Yaw regulated with Variable Speed
OPERATING DATA	
Rated Power	3620W
Cp	0.22
Wind Class	CLASS 3/IEC 61400-2
Rated Speed	13 m/s
Cut in Speed	3 m/s
Cut out Speed	20 m/s
Max Survival Speed	52 m/s
Sway at Hub Height	0.7' @52 m/s
Noise	Negligible across normal operating range
Extreme Weather/ Safety Critical Protection	Turbine rotor clutch automatically disengages, allowing rotor to 'freewheel'
ROTOR	
Number of Blades	8x2
Diameter	2.5m
Blade Length	4m
Rotor Length	5.5m
ADVANCED WIND CHANNELLING SHIELD	
Number	2
Length	2.160m
Radius	1.315M
Angle	75°
Surface Area	2.698m ²

ELECTRICAL	
Generator	Direct Drive Pancake PMG
Transmission	Low maintenance multi-stage gearbox
TOWER	
Tubular Column	
Diameter	813mm
Total height inc. Top Frames & Lightening Rods	25 - 40 m max
Top operational Hub Height	17.1m
Parked Hub Height (optional)	5m
Ground Level Maintenance Hub Height	2.4m
Rotor Transit System (optional)	PLC controlled winch with fail on brake; Tower Transit Guide System
Telecom Interface	Common flange to accept telecoms industry standard Top frames
Lightening Protection	Yes
HYBRID ENERGY SYSTEM	
Output	48V DC inverted 110V/240V AC
Solar	3.3kW Bifacial Solar PV Canopy
Back up generation source	Diesel/Biofuel generator
Battery Store	Intelligent MNC Lithium technology; up to 36kWh storage and back up
Enclosure	Climate controlled secure enclosures
Remote Monitoring	Fully integrated communications; Live streaming telemetry to client Management systems
Grid Compatible	Yes