

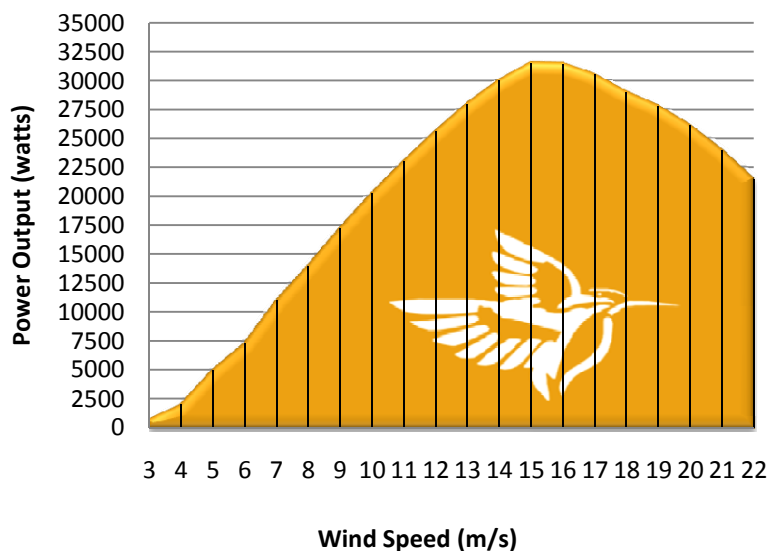
# 20kW

## Turbine Technical Parameters



Rated Power (W):	20,000 Watts
Maximum Output (W):	30,000 Watts
Charging Voltage (V):	DC 240V
Output Voltage (V):	110V to 380V
Number of Blades:	3
Blade Material:	GRP (Glass Fiber Reinforced Plastic)
Blade Diameter:	9m (29.5 ft.)
Start-up Wind Speed:	3m/s (6.7 mph)
Rated Wind Speed:	10m/s (22 mph)
RPM:	120
Speed Regulation (Protection):	Yawing (Mechanical) + Manual
Wind Energy Utilizing Ratio (Cp):	40%
Generator Output:	Single-phase Frequency Conversion AC
Output AC Frequency (Hz):	0-360
Rate Charging Current (A):	83.4
Maximum Charging Current (in a short time) (A):	120
Noise (5m behind turbine @ 5m/s gusting):	34 dB
Generator Efficiency:	85%
Generator Weight:	310kg (682 lbs.)
Turbine Weight:	1,500kg (3,300 lbs.)
Off Grid Battery (12V):	20 pcs.
Standard Warranty:	3 Year
Extended Warranty:	5 Year

## Power Curve Data Chart



## Annual Electrical Output

Average Wind Speed (m/s)	3	4	5	6	7	8	9	10
Average Wind Speed (mph)	7	9	11	13	16	18	20	22
Annual Power Output (kWh)	3280	13665	34736	67505	98388	126629	156692	189488

## Available Towers

Available Towers	Size
Monopole	98.4' & 132'
Freestanding Lattice	80'-100'-120'-140'

## Standard Equipment

Grid-Tie	Inverter, Controller & PC software.
Off Grid	Wind-Solar controller, charger & unloader.