

TBV Solar

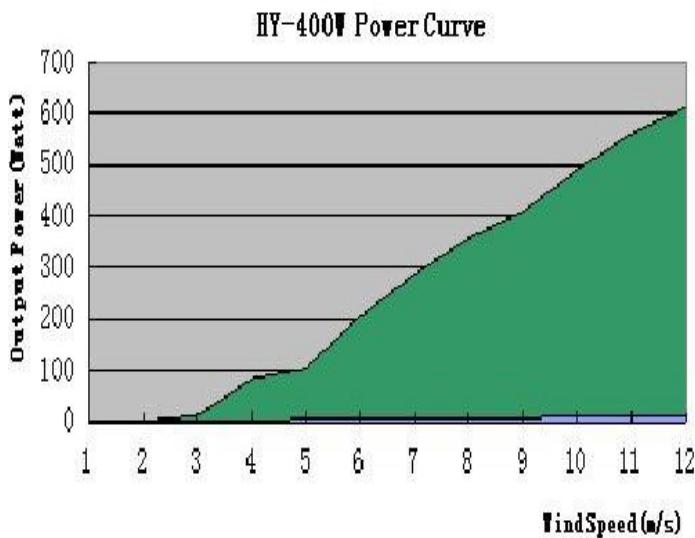
Add: Botha Street, Bronkhorstspuit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za



**Inverter with
charger&Control System**

Model	HY-400W
Rotor Diameter	1.5m (4.9 ft)
Rated power	400 Watts
Charging voltage	DC24V
Output voltage	AC 110V, 120V, 220V, 230V, 240V
Blades	3 Reinforced Fiber glass
Cut In wind speed	2.0m/s (4.5 mph)
Survival Wind Speed	112 mph(50 m/s)
Rated wind speed	9m/s (20 mph)
Overspeed Protection	Yawing (Mechanical)/Manual
Generator output	Three-phase frequency conversion AC
Generator efficiency	85%
Warranty	Three years
Unit Price	Rand
Wind turbine	5910
Wind Turbine Inverter & Controller	2325
6m Guy Tower	1420



Feature:

1. Start at Breeze
2. Easy for installation and operation
3. More reliability and durability with quiet-stable running
4. More efficient energy delivery with maintenance-free
5. Direct-drive PM Alternator with Aluminum frame cast sealed
6. Auto Furl Automatic protection protects the turbine in high winds by turning the alternator and blades out of the wind
7. Perfect choice for solar-hybrid complement system with year-round energy supply
8. **Warranty: wind turbine with Three years Warranty, control system with one year Warranty**

TBV Solar

Add: Botha Street, Bronkhorstspuit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za



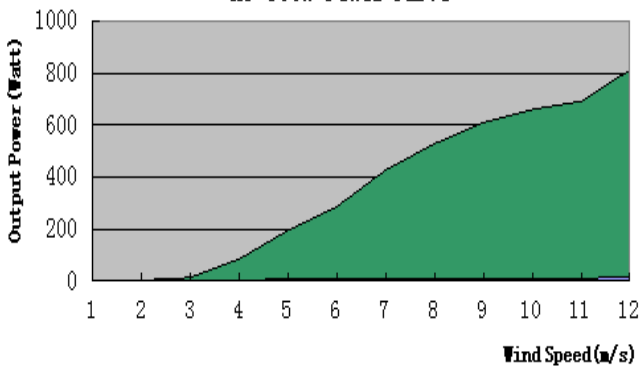
Wind Turbine Controller



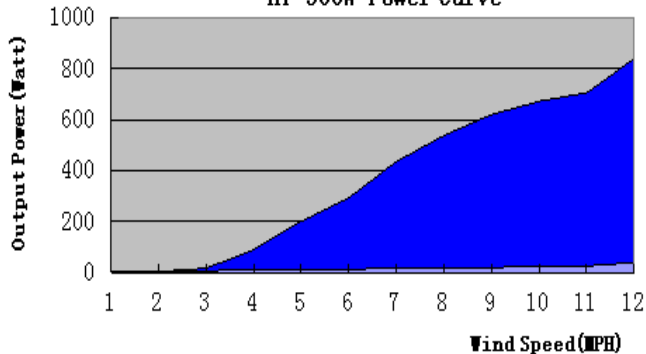
Pure Sine Wave Inverter

Model	HY-500W
Rotor Diameter	2.7m (8.7 ft)
Rated power	500 Watts
Charging voltage	DC24V
Output voltage	AC 110V, 120V, 220V, 230V, 240V
Blades	3 Reinforced Fiber glass
Cut In wind speed	2.0m/s (4.5 mph)
Survival Wind Speed	112 mph(50 m/s)
Rated wind speed	8m/s (18 mph)
Rated RPM	400
Overspeed Protection	Yawing (Mechanical)/Manual
Generator output	Three-phase frequency conversion AC
Generator efficiency	85%
Unit Price	Rand
Wind turbine	6450
Wind Turbine Inverter & Controller	2325
6m Guy Tower	1420

HY-500W Power Curve



HY-500W Power Curve



Feature:

1. Start at Breeze
2. Easy for installation and operation
3. More reliability and durability with quiet-stable running
4. More efficient energy delivery with maintenance-free
5. Direct-drive PM Alternator with Aluminum frame cast sealed
6. Auto Furl Automatic protection protects the turbine in high winds by turning the alternator and blades out of the wind
7. Perfect choice for solar-hybrid complement system with year-round energy supply
8. Warranty: wind turbine with Three years Warranty, control system with one year Warranty

TBV Solar

Add: Botha Street, Bronkhorstspuit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za

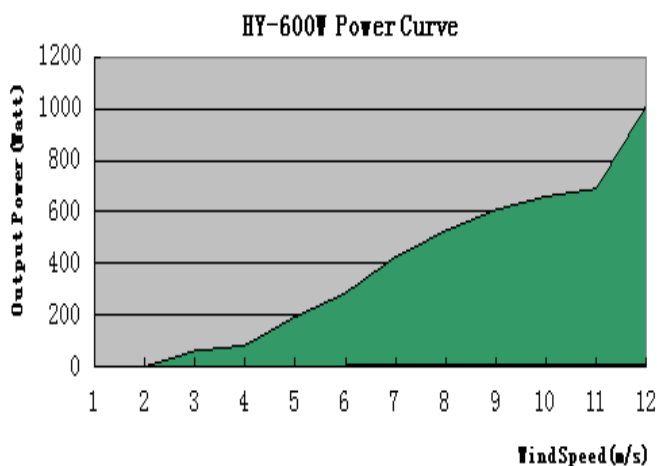


Wind Turbine Controller

Model	HY-600W
Rotor Diameter	1.5 m
Rated power	600 Watts
Charging voltage	DC24V
Output voltage	AC 110V, 120V, 220V, 230V, 240V
Blade	3 Reinforced Fiber glass
Start up wind speed	2.0m/s (4.5 mph)
Survival Wind Speed	123 mph(55 m/s)
Rated wind speed	11m/s (24 mph)
Rated RPM	400
Speed regulation	Yawing (Mechanical)/Manual
Generator output	Three-phase frequency conversion AC
Rated charging current	25 A
Generator efficiency	85%
Recommend battery capacity	12V200AH * 2pcs
Unit Price	Rand
Wind turbine	8000
Wind turbine Inverter & Controller System	3100
6m Guy Tower	1420



Pure Sine Wave Inverter



Feature:

1. Start at Breeze
2. Easy for installation and operation
3. More reliability and durability with quiet-stable running
4. More efficient energy delivery with maintenance-free
5. Direct-drive PM Alternator with Aluminum frame cast sealed
6. Auto Furl Automatic protection protects the turbine in high winds by turning the alternator and blades out of the wind
7. Perfect choice for solar-hybrid complement system with year-round energy supply
8. **Warranty:** wind turbine with Three years Warranty, control system with one year Warranty

TBV Solar

Add: Botha Street, Bronkhorstspuit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za

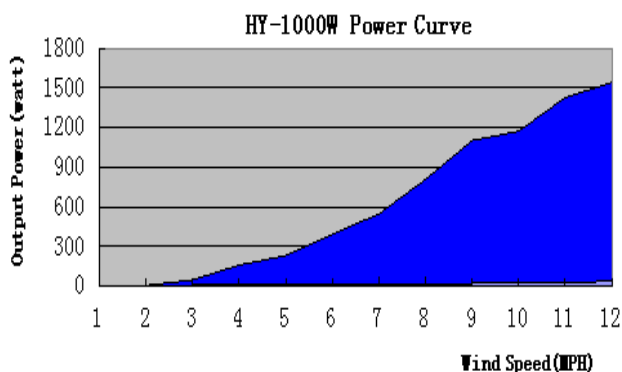
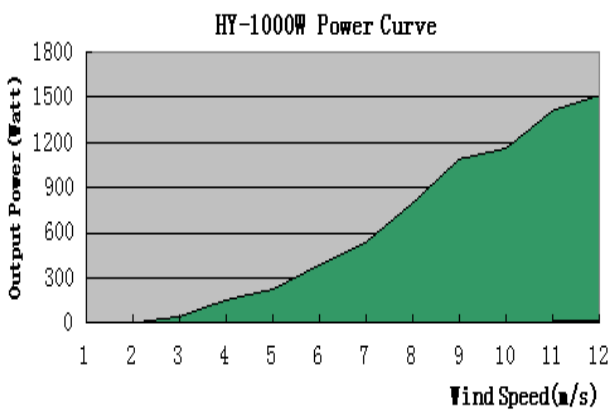


Wind Turbine Controller System



Pure Sine Wave Inverter

Model	HY-1000W
Rotor Diameter	3.0m (9.7 ft.)
Rated power	1,000 Watts
Charging voltage	DC24V/DC48V
Output voltage	AC 110V, 120V, 220V, 230V, 240V
Blade	3 Reinforced Fiber glass
Start up wind speed	2.0m/s (4.5 mph)
Survival Wind Speed	112 mph(50 m/s)
Rated wind speed	9m/s (20 mph)
Rated RPM	400
Speed regulation	Yawing (Mechanical)/Manual
Generator output	Three-phase frequency conversion AC
Rated charging current	41A/20A
Generator efficiency	85%
Recommend battery capacity	12V200AH
Unit Price	Rand
Wind Turbine	10110
Wind Solar Hybrid Controller	3500
Pure Sine Wave Inverter	3035
6m Guy Tower	2260



Feature:

1. Start at Breeze
2. Easy for installation and operation
3. More reliability and durability with quiet-stable running
4. More efficient energy delivery with maintenance-free
5. Direct-drive PM Alternator with Aluminum frame cast sealed
6. Auto Furl Automatic protection protects the turbine in high winds by turning the alternator and blades out of the wind
7. Perfect choice for solar-hybrid complement system with year-round energy supply
8. **Warranty: wind turbine with Three years Warranty, control system with one year Warranty**

Application:

- * Remote home and cabins
- * Water Pumping
- * Off shore beacons and remote monitoring equipment
- * Sailboats-Recreational boating
- * Science and education projects
- * Battery charging

TBV Solar

Add: Botha Street, Bronkhorstspuit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za



Wind Turbine Controller



Pure Sine Wave Inverter

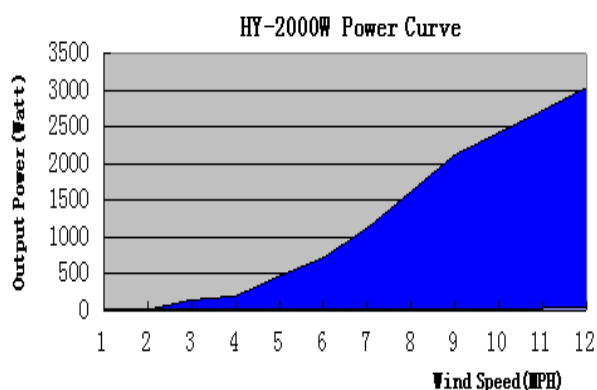
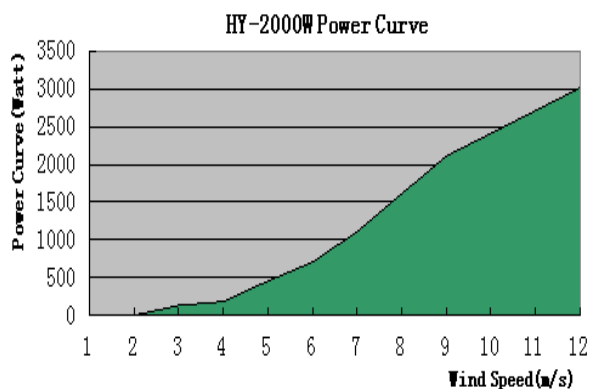
Model	HY-2000W
Rotor Diameter	3.6m (11.6 ft.)
Rated power	2,000 Watts
Charging voltage	DC48V/DC120V
Output voltage	AC 110V, 120V, 220V, 230V, 240V
Blade	3 Reinforced Fiber glass
Start up wind speed	2.0m/s (4.5 mph)
Survival Wind Speed	112 mph(50 m/s)
Rated wind speed	9m/s (20 mph)
Rated RPM	400
Speed regulation	Yawing (Mechanical)/Manual
Generator output	Three-phase frequency conversion AC
Rated charging current	41A/20 A
Generator efficiency	85%
Recommend battery capacity	12V200AH
Unit Price	Rand
Wind Turbine	13650
Charger&Controller System	4260
Pure Sine Wave Inverter	4520
9m Guy Tower	4520

Feature:

1. Start at Breeze
2. Easy for installation and operation
3. More reliability and durability with quiet-stable running
4. More efficient energy delivery with maintenance-free
5. Direct-drive PM Alternator with Aluminum frame cast sealed
6. Auto Furl Automatic protection protects the turbine in high winds by turning the alternator and blades out of the wind
7. Perfect choice for solar-hybrid complement system with year-round energy supply
8. **Warranty: wind turbine with Three years Warranty, control system with one year Warranty**

Application:

- *Remote home and cabins
- *Water Pumping
- *Off shore beacons and remote monitoring equipment
- *Sailboats-Recreational boating
- * Battery charging
- * Grid tie system



TBV Solar

Add: Botha Street, Bronkhorstspruit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za

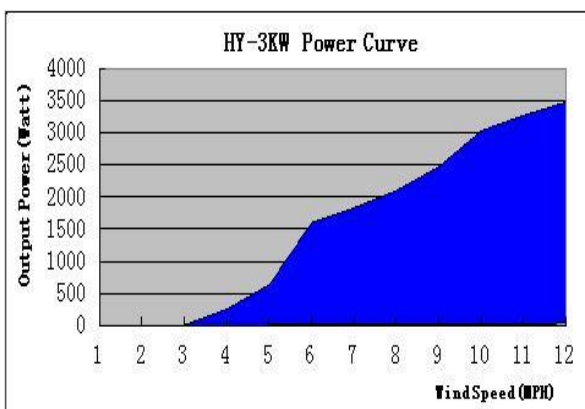
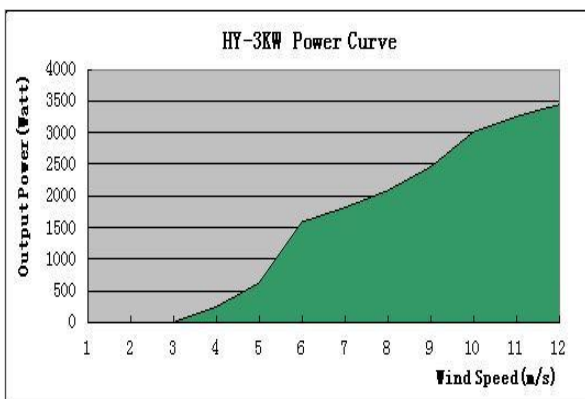


Controller System



Pure Sine Wave
Inverter

Model	HY-3KW
Rotor Diameter	13.1 ft(4 m)
Weight	286 LB (130 KG)
Rated Power	3 KW
Peak Power	3.4 KW
Rated Wind Speed	22 mph(10 m/s)
Startup Wind Speed	6.7 mph(3 m/s)
Working Wind Speed	6.7 mph-56 mph(3 m/s-25 m/s)
Survival Wind Speed	112 mph(50 m/s)
Rated RPM	280 RPM
Blades	3 Reinforced Fiberglass
Speed Regulation	Electromagnetic brake
Shutdown Mechanism	Manual Brake
Working voltage	DC 48V/DC120V/DC240V
Generator Style	3-phase AC PM
Grid tie connection	Optional
Unit Price	Rand
Wind Turbine	23885
Charger and control system	4322
Pure Sine Wave Inverter	6325
9m guy Tower	5810



Feature:

- 1. Strong and Powerful:** Direct PMG with 90% generator efficiency. High precision-cast steel and hot-dipped galvanized for anti-corrosion protection on generator.
- 2. Double speed regulation:** adopts speed regulation mechanisms. Manual brake system will protect the wind turbines in strong wind over 25m/s(56mph) .
- 3. More reliability and durability** with quiet-stable running
- 4. The graphite brush and slip ring** fixed inside the wind turbines will prevent the cable twisted.
- 5. Warranty:** wind turbine with Three years Warranty, control system with one year Warranty

TBV Solar

Add: Botha Street, Bronkhorstspuit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za



Inverter



Control System

Model	HY-5KW
Rated Power	5 KW
Peak Power	7.7 KW
Rotor Diameter	20 ft(6.2 m)
Rated Wind Speed	26 mph(12 m/s)
Cut In Wind Speed	5.6 mph(2.5 m/s)
Working Wind Speed	6.6 mph-56 mph(3 m/s-25 m/s)
Survival Wind Speed	112 mph(50 m/s)
Rated RPM	200 RPM
Blades and Material	3 Reinforced Fiberglass
Over speed protection	Auto-Furling&Hydraulic Brake
Shutdown Mechanism	Manual/Hydraulic Brake
Output voltage	240V DC
Generator Style	3-phase AC PMG
Grid tie connection	Optional

Price and description

Wind Turbine: R 55220

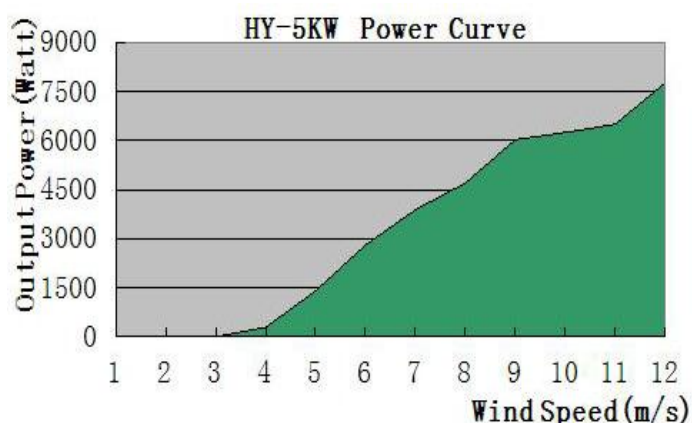
Wind Turbine Control system: R 11300

Pure Sine Wave Inverter: R 17340

12m guy tower(Optional): R18270

Feature:(HY-5KW)

- 1. Strong and Powerful: Direct PMG with 90% generator efficiency. High precision-cast steel and hot-dipped galvanized for anti-corrosion protection on generator.**
- 2. Manual & Hydraulic brake :** wind turbine are equipped with manual brake system and Hydraulic brake system to protect the wind turbine system.
- 3. The graphite brush and slip ring fixed inside the wind turbines will prevent the cable twisted.**
- 4. More reliability and durability with quiet-stable running**
- 5. More efficient energy delivery with maintenance-free**
- 6. Warranty: wind turbine with Three years Warranty, control system with one year Warranty**



TBV Solar

Add: Botha Street, Bronkhorstspuit, Gauteng

Mail: info@tbvsolar.co.za www.tbvsolar.co.za



Controller



Inverter

Model	HY-10KW
Rated power (W)	10,000 Watts
Charging voltage (V)	DC240V
Output voltage (V)	AC 110V, 120V, 220V, 230V, 240V,380V
Blade material	3pcs Glass Fiber Reinforced Plastic
Blade diameter	8.0m (26 ft.)
Start up wind speed(m/s)	2.5m/s (5.6 mph)
Survival wind speed (m/s)	50m/s (112 mph)
Rated wind speed(m/s)	10m/s (22 mph)
RPM	180
Speed regulation (protection)	Yawing (Mechanical) & Hydraulic brake
Yaw mechanism	Hydraulic Brake
Yaw mode	auto/manual
Protection mode	Yaw, Hydraulic brake, dump load
Generator output	Three-phase frequency conversion AC
Rated charging current (A)	42
Generator efficiency	90%

Price and description

Wind Turbine: R 96750

Wind Turbine Control system: R 28389

Pure Sine Wave Inverter: R 41280

12m guy tower(Optional): R45150

Feature:(HY-10KW)

- 1. Strong and Powerful: Direct PMG with 90% generator efficiency. High precision-cast steel and hot-dipped galvanized for anti-corrosion protection on generator.**
- 2. Manual & Hydraulic brake : wind turbine are equipped with manual brake system and Hydraulic brake system to protect the wind turbine system.**
- 3. The graphite brush and slip ring fixed inside the wind turbines will prevent the cable twisted.**
- 4. More reliability and durability with quiet-stable running**
- 5. More efficient energy delivery with maintenance-free**
- 6. Warranty: wind turbine with Three years Warranty, control system with one year Warranty**

