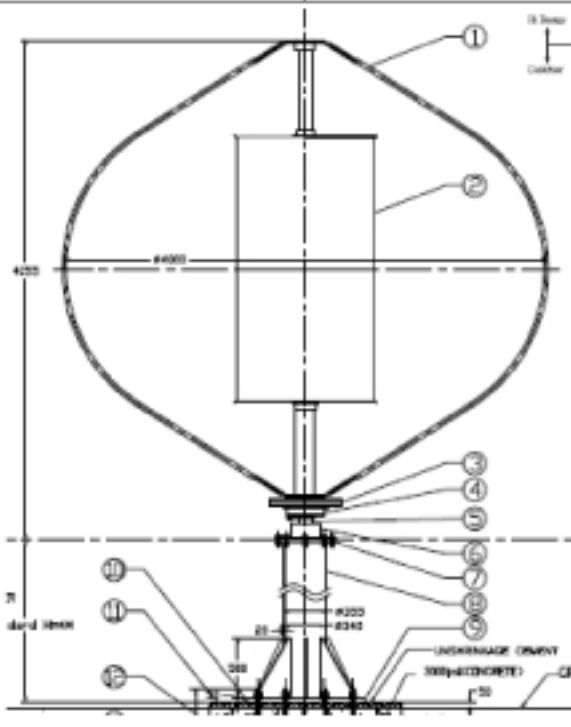
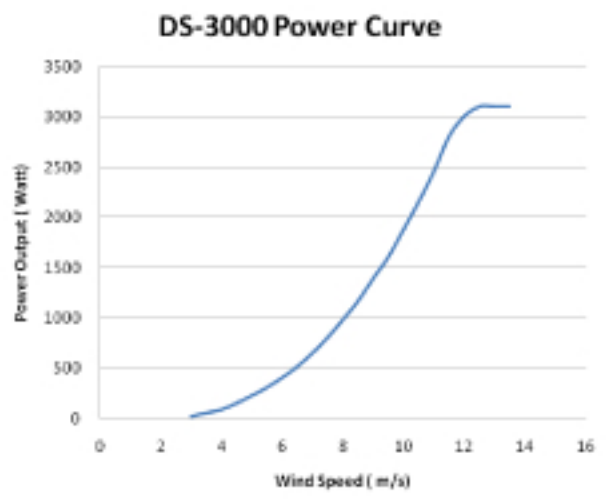


Vertical Axis Wind Turbine Power System

Model number: DS3000

PRODUCT SPECIFICATIONS

| General Specifications | | | |
|---------------------------------|--|--|--------|
| Rated Power | 3kW | Rated Wind Speed | 12 m/s |
| Rated Speed | 200 rpm | Cut in Wind Speed | <3 m/s |
| Cut out Wind Speed | 15 m/s | Survival Wind Speed | 60 m/s |
| Dimensions/Weight | |  | |
| Rotor Diameter | 4m | | |
| Rotor Height | 4.2m | | |
| Tower Height | 4 m (minimum) | | |
| Total Height | 8.2m (minimum) | | |
| Turbine Weight | 680kg w/o tower | | |
| Rotor Specifications | | | |
| External Darrieus | 3 blades | | |
| Internal Savonius | 2 layers | | |
| Blades Material | Anodized aluminum | | |
| Axis Material | Galvanized steel SS400 | | |
| Generator Specifications | | Power Curve | |
| Generator Type | AC, 3phase, synchronism PMG |  | |
| Rated Output | 3kW | | |
| Braking System | | | |
| Automatic | Automatic dump-load and 3-phase short circuit braking system | | |
| Manual | Mechanical drum brake | | |
| Operation Conditions | | | |
| Ambient Temperature | -10~40°C | | |
| Ambient Humidity | 95% max. | | |

Vertical Axis Wind Turbine Power System

Model number: DS3000

PRODUCT SPECIFICATIONS

WT23000 Grid-tied inverter

Specification of WT23000


DSP Fully Digital-Controlled Grid-tied Windpower Inverter

| | |
|---------------|-------|
| Output power | 3000W |
| Maximum power | 3300W |

Output

| | |
|------------------------|-------------------|
| Operational voltage | 192 to 254 VAC |
| Maximum Output current | 15 A |
| Operational frequency | 50/60Hz |
| Power factor | >0.99 @ Full-Load |
| Current distortion | <5% |
| Maximum Efficiency | >95% |
| Anti-Islanding | Yes |

Environment

| | |
|--------------------------|--------------------------|
| Protection degree | IP45 |
| Operation temperature | -20 to 40°C |
| Humidity | 0 to 95%, non-condensing |
| Heat Dissipation | Convection |
| Acoustic noise level | <40dB, A-weighted |
| Communication & features | RS232 (Optional) |
| Entire-islanding | UL 1741 |

Mechanical

| | |
|-------------|-------------|
| WxDxH (mm) | 320*168*520 |
| Weight (kg) | 18kg |

| | |
|--------------|-----------------------------|
| Certificates | VDE0126. UL1741 is pending. |
|--------------|-----------------------------|

DNE-PVI-6000


| SPECIFICATIONS | |
|--|---|
| INPUT PARAMETERS (DC Side) | DNE-PVI-6000 |
| Nominal DC Power [kW] | 6.18 |
| Total Max. Recommended DC Power [kW] | 6.4 |
| Operating MPPT Input Voltage Range [V] | 50 to 580 (360 nominal) |
| Full Power MPPT Range [V] | 180-530 |
| Max. Input Voltage [V] | 600 |
| Activation voltage [V] | 200 nominal (adjustable within 50-350) |
| No of Independent MPPT Trackers | 1 |
| No. of DC Inputs | 1 |
| Max. DC Current, each MPPT [A] | 36 (44 short circuit) |
| Thermally Protected DC Side Varistor | 4 |
| DC Connections | 4 (2 positive; 2 negative) Screw terminal block Wire size: Solid from AWG 20 to AWG 6 / Stranded from AWG 20 to AWG 8 Cable gland: M25-cable diameter 3/8" to 11/16" |
| OUTPUT PARAMETERS (AC Side) | DNE-PVI-6000 |
| Nominal AC Power [kW] | 6 |
| Max. AC Power [kW] | 6 |
| AC Grid Connection | single phase 208/277 - split phase 240 |
| Nominal AC Voltage Range [V] | Default - 240V; Optional 208 or 277V (setting required) |
| Maximum AC Voltage Range [V] | 187.2-224.6; 216-25.2; 249.3-299.2 |
| Nominal AC Frequency [Hz] | 60 |
| Max. AC Line Current [A] | 24/20/18 (30 short circuit) |
| AC Side Varistor | 2 (Live - Neutral / Live - PE) |
| AC Connection | Screw terminal block Wire size: Solid from AWG 20 to AWG 6 / Stranded from AWG 20 to AWG 8 Cable Gland: M25 - Cable diameter 3/8" to 11/16" |
| Line Power Factor | 1 |
| AC Current Distortion (THD) | <2% at rated power with sine wave voltage |
| Max. Efficiency | 97% |
| CEC Efficiency | 96.5% |
| Feed In Power Threshold [W] | 20 |
| Nighttime Consumption [W] | <2 |
| Isolation | No (Transformerless) |
| ENVIRONMENTAL PARAMETERS | DNE-PVI-6000 |
| Cooling | Natural cooling |
| Ambient Temp. Range [°C] | -25 / + 60 (output power derating above 50 °C) |
| Operating Altitude [ft] | 6,000 |
| Acoustical Noise [dBA] | < 50 @ 1mt |
| Environmental IP Rating | IP65 |
| Relative Humidity | 0-100% condensing |
| MECHANICAL | DNE-PVI-6000 |
| Dimensions | (HxWxD) [mm] 740x325x195 (29 1/8" x 12 13/16" x 7 11/16") |
| Weight [kg] | 27 (57.3 lbs) |
| OTHER | DNE-PVI-6000 |
| Display | YES (Alphanumeric 2 lines) |
| Communication | RS485 (Spring terminal block - Conductor cross section: AWG28-16) USB connection (Service) *Aurora Easy-Control" system for remote control (Optional) |

Standards and Codes

Aurora inverters comply with standards set for grid-tied operation, safety, and electromagnetic compatibility including: UL1741& CSA -C22.2 N.107.1-01, VDE0126, CEI 11-20, DK5940, CEI64-8, IEC 61683, IEC 61727, EN50081, EN50082, EN61000, CE certification, El Real Decreto RD1663/2000 de España.