

HWG-600 Wind Turbine

The HWG-600 is a high specification, high output wind turbine designed for domestic and industrial applications.



The HWG-600 is a high specification wind turbine that is applicable to a wide range of domestic, agricultural and industrial uses. These include the provision of power for communications systems, remote telemetry systems, marine systems, lighting for motorway roadworks, outhouses and the supplementing or replacement of domestic utility grid connections

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The following are some of the features of the HWG-600:

- Generator: the 24v generator is a high efficiency design that produces three phase current using high quality, permanent magnets. Its unique winding and pole wheel design reduces the start-up torque so that the HWG can generate at very low wind speeds.
- Generator Body: made from high-quality precision-cast aluminium, which results in maximum durability in adverse weather, sandy and salty environments and marine applications.
- Rotor and Blades: three high performance blades manufactured using a specialized precision injection moulding process. This results in blades of exceptional consistency, an efficient aerodynamic profile and efficient mass distribution that ensures the rotor operates with minimal noise and vibration.
- Controller: implemented as a separate unit and supplied as part of the overall system. It supplies the following features:
 - Tracks and checks battery terminal voltage
 - Battery over-charge and over-discharge protection
 - Over-load protection
 - Short-circuit protection
 - Thermal protection
 - Controls rotor speed to prevent damage to the generator

- Ability to control up to 300 watts of solar PV panels in addition to the wind turbine

Easy to Install

The HWG-600 is designed for easy installation. The system is integrated into a minimum number of components such that it is easy for non experts to install a basic system.

Figure 1 depicts a typical HWG installation.

Please see the table overleaf for the detailed specifications of this turbine.

Typical HWG Installation

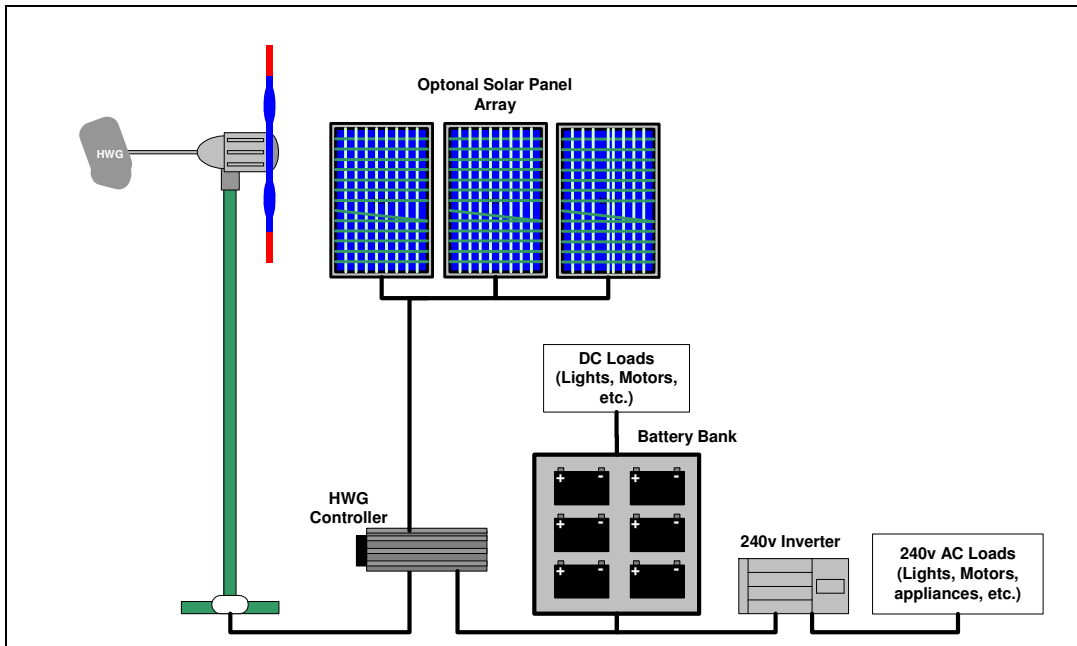


Figure 1 Typical HWG-600 Installation

Detailed Specifications

Feature	HWG-600
Generator Type	3 phase generator with high-quality permanent magnets. Cast aluminium body.
Generator Weight	22 kg
Blade/Rotor Construction	3 Blades, Advanced injection moulded thermoplastic
Controller Features	Phase rectification, battery voltage checking, over-charge protection, over-discharge protection, over-load protection, short-circuit protection, thermal protection, rotor overspeed protection
Controller	24v model
Rated Power	600w
Maximum Power	750w
Output Voltage	24v
Max Solar Power (input to controller)	300w
Rotor Diameter	1.8 meters
Start Wind Speed	2.3 m/s
Cut-in Wind Speed	3.0 m/s
Rated Wind Speed	12.0 m/s
Optional tower Height	6 meters

TO ORDER:

To order an Energy Liberators product, please call (087) 2375153 or email info@energyliberators.com. Outside Ireland, please call +353 87 2375153.

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