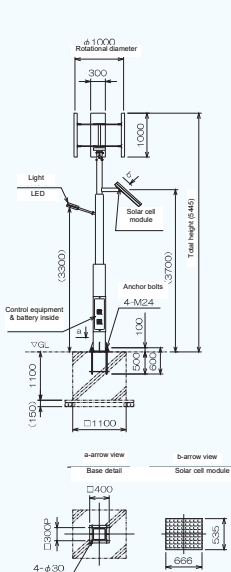


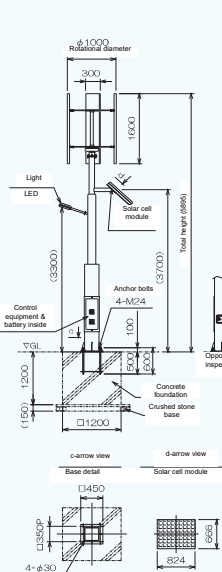
Kharios



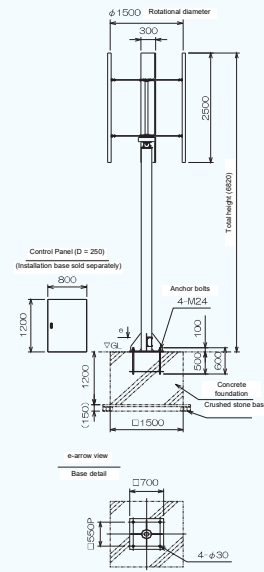
N200-BGL



N500-GL-S



N1000-BGG



Model number		N200-BGL	N500-GL-S	N1000-BGG
Purpose of use		Standalone power supply type (LED streetlight)	Standalone power supply type (LED streetlight + emergency power supply)	Grid-connected type (low-voltage, on-premises grid)
Wind turbine generator	Start-up wind speed	1.2 m/s	1.3 m/s	0.8 m/s
	Cut-in wind speed	1.6 m/s	1.6 m/s	2.0 m/s
	Rated output (wind speed)	200 W (11.5 m/s)	500 W (11.5 m/s)	1 kW (11.0 m/s)
	Max. instant. wind speed	60.0 m/s		
	Brake type	Electrical (automatic brake)		
	Wind turbine	Turbine size	φ1.0 m × H1.0 m	φ1.5 m × H2.5 m
		Blades	4 blades	
		Material	Aluminum alloy (chromate + urethane resin coating)	
	Generator	Std. color	Yellow-green (equivalent to JPM A 37-80T)	
		Model	NKC-400-380	NKC-1000-200
Accessories	Control equipment	Inside support column		Control panel (separate) (W 0.8m x H 1.2m x D 0.25m)
		Solar cell module	48W x 1	36W x 2
		Battery	DC12V-60Ah x 1 (inside support column)	DC12V-50Ah x 2 (inside support column)
		Light	LED exterior light x 1	
	Total height	Approx. 5.45m	Approx. 5.93m	Approx. 6.82m
	Approximate weight	Approx. 280 kg	Approx. 320 kg	Approx. 450 kg
	Nominal foundation size	Square 1.1m x 1.1m	Square 1.2m x 1.2m	Square 1.5m x 1.2m

* The 5000-GL is recommended only for installation conditions where the average annual wind speed is at least 5 m/s. Contact NKC for detailed specifications, dimensions, and other information.

Manufacturer:
Nakanishi Metal Works Co., Ltd. (NKC) EPD Section
3-3-5, Temmabashi, Kita-ku, Osaka 530-8566 Japan
Phone: 06-6351-4832, Fax: 06-6351-7822
Website: <https://www.nkc-j.co.jp/>

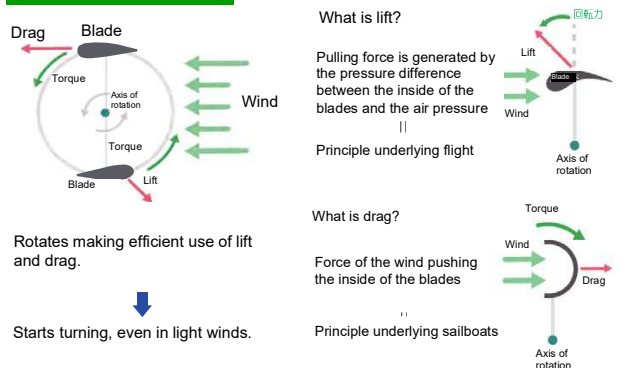
US Headquarters:
NKC of America, Inc.
1584 East Brooks Rd Memphis, TN 38116
Phone: 901-396-5353
Website: <https://www.nkcusa.com/>
Email: info@nkcusa.com

Kharios Series

Kharios is a vertical axis small-scale wind power generating system that harnesses natural energy in a way that is good for the environment. With its high-efficiency energy conversion and low noise, Kharios easily fits into urban settings. Kharios is well-suited to provide lighting, emergency power, and other uses.

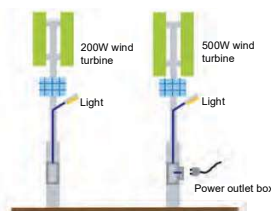
- With its vertical configuration, the Kharios wind turbine efficiently converts wind power into rotational energy, regardless of wind direction
- With its low RPM generator, Kharios starts up even in light winds and runs with low noise and vibration
- Simple design with minimal environmental impact, space-saving installation
- Customizable configurations to meet special needs

Turbine Concept



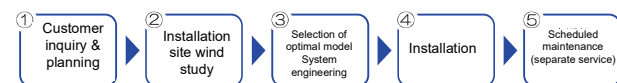
System Overview

Standalone power models
The battery is charged when the turbine generates more power than is being used. Conversely, the battery supplies power when there is more demand for power than the wind turbine can generate.



Installation Sequence

NKC provides end-to-end engineering services to meet your needs, from planning to system installation. Process leading up to your order



NKC will recommend the wind power system that's right according to the way you will use it, where the system will be installed, and what your particular needs are.

When you place your order:

This wind power generator system works by using the wind to turn a turbine. Therefore, its performance may vary widely depending on local conditions where it is installed. Talk to your dealer about how you will be using the system: the dealer will recommend the turbine that will best meet your requirements.

Product Lineup

200W wind and solar hybrid generation street light

500W wind and solar hybrid emergency generating system

1kW-5kW wind power generation system

N200-BGL

Standalone power generation system
The N200-BGL is a standalone system that generates clean energy by combining a wind turbine generator with a solar cell module. This power is used at night to light an LED streetlamp. A solar timer turns on the LED light every evening for up to 10 hours after sunset.



N500-GL-S

Standalone power generation system
Like the N200-BGL, the N500-GL-S combines a wind turbine generator with a solar cell module. In addition to powering an LED streetlamp, the standard system is equipped with a power outlet for emergency power supply. This outlet provides AC100V or DC5V (USB) power which can be used in a power outage or other emergency.

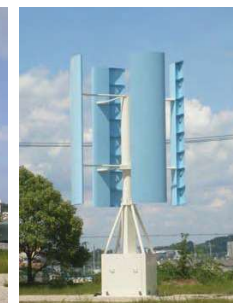


N1000-BGG / 5000-GG

Grid-connected system

The N1000-BGG/5000-GG are wind power generating systems that are connected to the power grid. These systems are equipped with a wind power turbine and a control panel. The power that is transmitted from the power conditioner housed in the control panel can be used for electrical loads (such as lighting and appliances connected to electrical outlets) that are connected to the power grid. The facility can save energy costs by locally generating clean power in this way.

* Generating equipment installers must consult with the electric power company when connecting equipment to the power grid.
* At the planning stage, NKCC will check to see if there are installation conditions (location, wind conditions, etc.) to be considered when connecting this product in the power grid system. NKCC may recommend a standalone power system, depending on conditions.



N1000-BGG

5000-GG

Customization

- You can control when the standard LED light turns on and its brightness. The power generated can also be used for purposes other than lighting.

Clock tower



Monument



NKC design project



windmill windtree

Security



■ Power outlet box (N-500-GL-S standard system)

Can be used as emergency power for radios, wireless devices, mobile phones.



N500-GL-S standard type



Basic type

■ Power generation indicator displays

NKC offers compact and bulletin board-style indicators. These can be installed wherever you need to check generator performance.

