Compact wind power generator - an efficient and Solar/wind hybrid street lights

## Features

- The low rotational speed reduces the noise and makes the wind turbine perfect for use in urban areas. Applications include street lights, emergency lights and many other uses.
- The blades are in a shape specially designed to aeronautical engineering principles, and start operating even with a weak breeze.
- The wind turbine converts the power of wind from any direction to rotation and is suited to the wind conditions in Japan, where the wind direction frequently changes.

# Overview (Technical principles, actions, etc.)

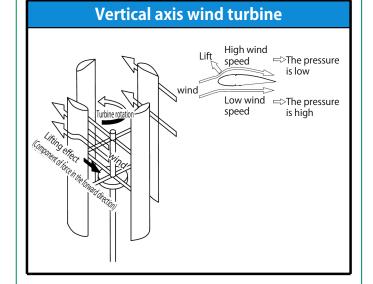
#### "Hybrid power generation system"

The power supply consists of a small generator, a solar panel module and a sealed battery. The wind/solargenerated power is stored in the sealed battery and the battery stably supplies the power to illuminate the light. The battery has a sufficient capacity for powering the light every day for up to approximately 4 days without being charged by the wind/solar power generator.

#### "Control system (controller)"

The system is designed to control the voltage using a controller; if the voltage reaches a pre-set level under strong wind conditions, the electric brake is automatically applied.

The electric brake can also be applied or released manually during maintenance.





### Introductory Track Record

Many generator systems are operating in public facilities, parks, schools, factories and commercial facilities.

#### Effects

◎ The wind power generator system consists of a small wind power generator and a solar panel module. The system constitutes a green night street light by incorporating an independent power source for illuminating the high intensity LED light.

(CSR) by companies, factories, mass merchandiser Water Energy saving/Energy recovery New energy

field parks

rarking lots, factories and other facilities

Air

Nakanishi Metal Works Co., Ltd. EPD Department 3-3-5 Tenmabashi, Kita-ku, Osaka 530-8566

• TEL / +81-6-6351-6515 • FAX / +81-6-6352-5060 • E-Mail / mori-m@nkc-j.co.jp http://www.power-generator.ip/

\*\*Note: This publication introduces examples of technologies and products believed useful towards solving environmental and energy issues. In no way does it constitute guarantees concerning their transfer or sale.