Independent Power Supply System

NTN Hybrid Street Light

Wind × Solar

**DAY**
Solar and wind power generation

**NIGHT**
Wind power generation and LED illumination
Solar power generation by day, wind power generation by night with blowing winds. Hybrid independent power supply system that promotes safer communities.

**NTN Hybrid Street Light with independent power supply that generates electricity by solar and wind.**

### 01 No electrical construction or electricity expenses
The independent power supply requires no above-ground or underground wiring work, thus allowing for quick installation. Of course, no external power supply is needed!

### 02 Surprisingly quiet
Extremely quiet even with wind speeds over 5 m/s. Due to the winglet blades and high precision NTN bearings, it has superior in silence, allowing for installation in residential areas.

### 03 Stable power generation. Plenty of electricity accumulation
Rotation is initiated with wind speeds as low as 1 m/s in any direction (360°), providing stable electricity generation. With a full battery charge, 5 days power supply for LED lighting is possible.

### 04 Tough for high wind
Brake is automatically applied at wind speeds of 12 m/s or higher. In accordance with the building standards act, safe performance is confirmed for a maximum instantaneous wind speed of 60 m/s.

### 05 Sophisticated design
It has a color tone and form that is in harmony with streets, parks, bus stops, schools, and advertisements.

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Safety light in case of accident, casualty or disaster

Independent type NTN hybrid street light can provide light to protect the lives of residents in the area under black out by disaster. LED lights illuminate safe evacuation paths and areas, derived from green energy power by a combination of solar and wind during daytime and night time, in addition to the battery equipped.

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**Wide range of option**
- Bench
- Power for emergency
- USB output
- Security camera
- Guide plate
- Colored wing of turbine

**Consistent performance with Hybrid**
With power by wind and solar, LED lights are illuminated during night time by battery power.

**Specification**
- **Wind Turbine**
  - Rated Power Output: 200W
  - Rotor Diameter: 0.8m
  - Blade Length: 1.2m
  - Type: Vertical axis
  - Brake: Electric type
  - Survival Wind Speed: 60 m/s (Max. instantaneous wind speed)

- **Solar Power Generator**
  - Rated Power Output: 90W
  - Power Consumption: 10W

- **LED Light**
  - Power Consumption: 5W
  - Illuminance: 900 lm

- **Appearance**
  - Design: #Options

**Warranty**
Product warranty is for ONE year.

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Illustration and photos are images.
Profile of NTN

Ever since being founded in 1918, NTN has made valuable contributions to a wide range of industries as a machinery manufacturer dealing mainly with bearings.

In the aerospace field, NTN bearings were used in the first domestically produced airplane in Japan, and has built a reputation for high quality and reliability as the only company in Japan today capable of supplying all major global jet engine companies with main shaft bearings. In the automotive field, NTN has the leading global share of hub bearings that support the wheels of cars, and the second highest share in the world for driveshafts that transmit engine power. NTN has contributed to improvements to vehicle ride comfort and fuel efficiency over many years, And in the field of high-speed rail, NTN was involved in development of the first 0 series Shinkansen from the outset, making valuable contributions to safety and comfort for more than half a century. More recently, efforts are being made for greater development and proposals of systems and module products with highly integrated technologies and knowhow fostered through existing business – the Condition Monitoring System for Wind Turbines (CMS) considered a prime example. In the aftermarket business, to support customers' business from a various angles, NTN holds the technology training services etc.

Green Energy Products of NTN

NTN, which is celebrating its 100th anniversary in 2018, is developing business in the natural energy field by fusing the technology and knowhow we have developed over the years. Products under development include small wind turbines, hybrid street lights and micro hydro turbines that utilize highly efficient blade technology to generate electricity from less natural energy. NTN is helping to resolve the world's environmental issues and energy problems by supplying clean energy efficiently and without emitting greenhouse gases.

Inquiry

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