

DATA SHEET

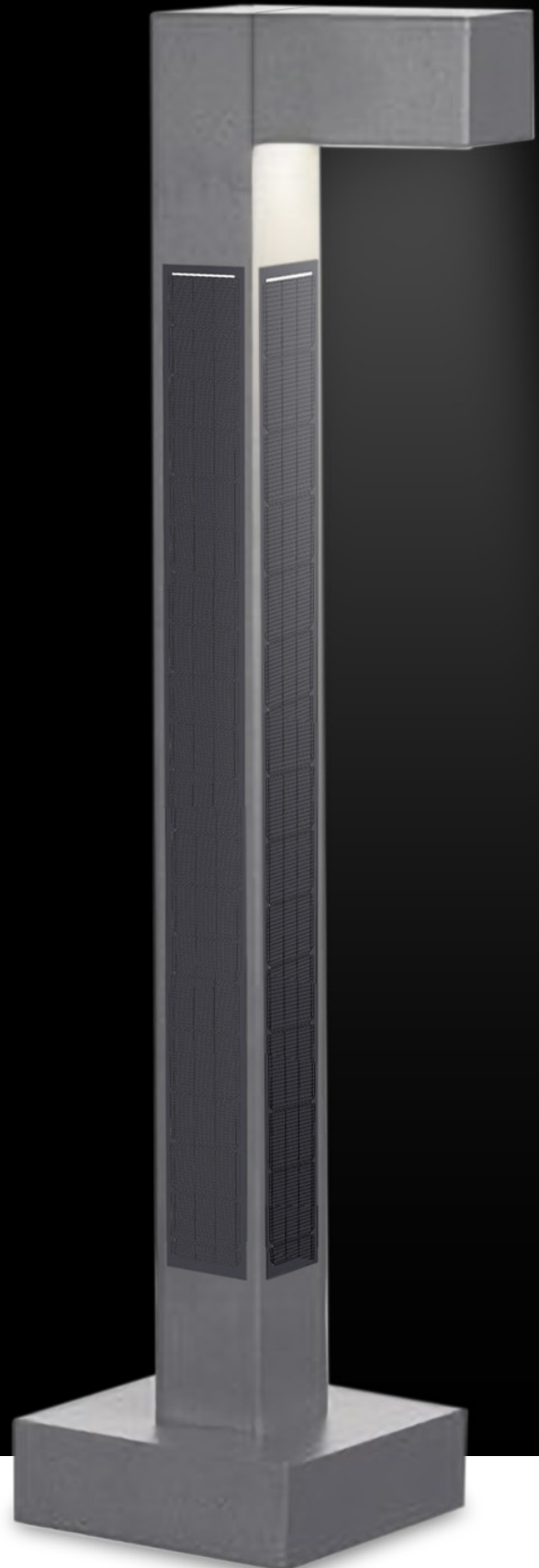
Vacker

Vacker is our solar bollard designed for urban centers, parks and residential areas.

The solar panels are elegantly designed into the surface and create essential forms, pure and linear.

FEATURES

- Stand alone solar powered LED bollard
- Light in areas where cabling is not available or feasible
- Suited for areas with difficult terrain to install road lights poles
- Can be used for guided road lighting
- No cabling and excavation cost
- Safe navigation in remote areas
- Renewable outdoor lighting
- Solar cells generate power during the day
- Power is consumed during the night to light up the luminaries
- Integration of sensor (optional)
- CO2 neutral
- Possible to integrate a variety of sensor based technology
- Supports Control Management System



LUMINARIES

Material	Top in cast aluminum, bollard in galvanized steel
Coating	Graphite Grey: SW302G (close to RAL 9007) Silver Grey: MW3000 Corten Brown: Mars 2525, YX355F
Screen	Clear polycarbonate with UV-resistant acrylate on both sides
Mounting	Rooted or flanged base
Connection	Max 3 cables, 5x16 mm ²
Classification	IP66, class II
Impact resistance	IK10
Weight	7,5kg

LED AND DRIVER DATA

Operational life	Min 100.000 hours at a max 25° C, L80B10
Total consumption	9 or 12 W (350 or 500mA)
Color temperature	2700, 3000 or 4000 Kelvin
Color rendering	Min 90 Ra
IP & IK rating	IP66 & IK08
Optics	T0, FC, LO, PR, PL
Material	- AB46100 coated, Anodized Aluminum - Optical Group PPMA - Gasket in silicon foam - Screws in AISI 304 (A2) steel
Driver	LED driver, 48VDC
Operational life	Min 50,000 hours

BATTERY

Based on a Lithium-Ion-Phosphate environmental friendly battery (no Cadmium, Mercury or Lead).

OPERATING TEMPERATURE RANGE	0° C to 50° C
LIFE CYCLE	4000
SIZES	12.8V, 150Wh

CONTROLLER

HANDLED CHARGE DURING DAYTIME	Up to 10W
USED TO LIGHT UP THE LED AT NIGHTTIME	Up to 12W
SMART CONTROLLER & BATTERY MANAGEMENT SYSTEM	Smart controller to ensure all night long lighting. The controller will optimize light intensity based on available battery energy

BOLLARD® BATTERY

The Vacker battery solution is based on a Nickel-Metal-Hydride environmental friendly battery (No Cadmium, Mercury or Lead).

It offers a wide operating temperature range -30° C to 77° C with a typical life cycle on 4000 cycles.

For the bollard it comes in two sizes, 3.6V - 43Wh and 3.6V-86Wh.

Pending on location and environment the solution will be designed accordingly.

BOLLARD CONTROLLER

The controller in the bollard is the intelligent heart of the solution. The controller maximizes the energy available from the solar panel and uses the energy to charge a battery.

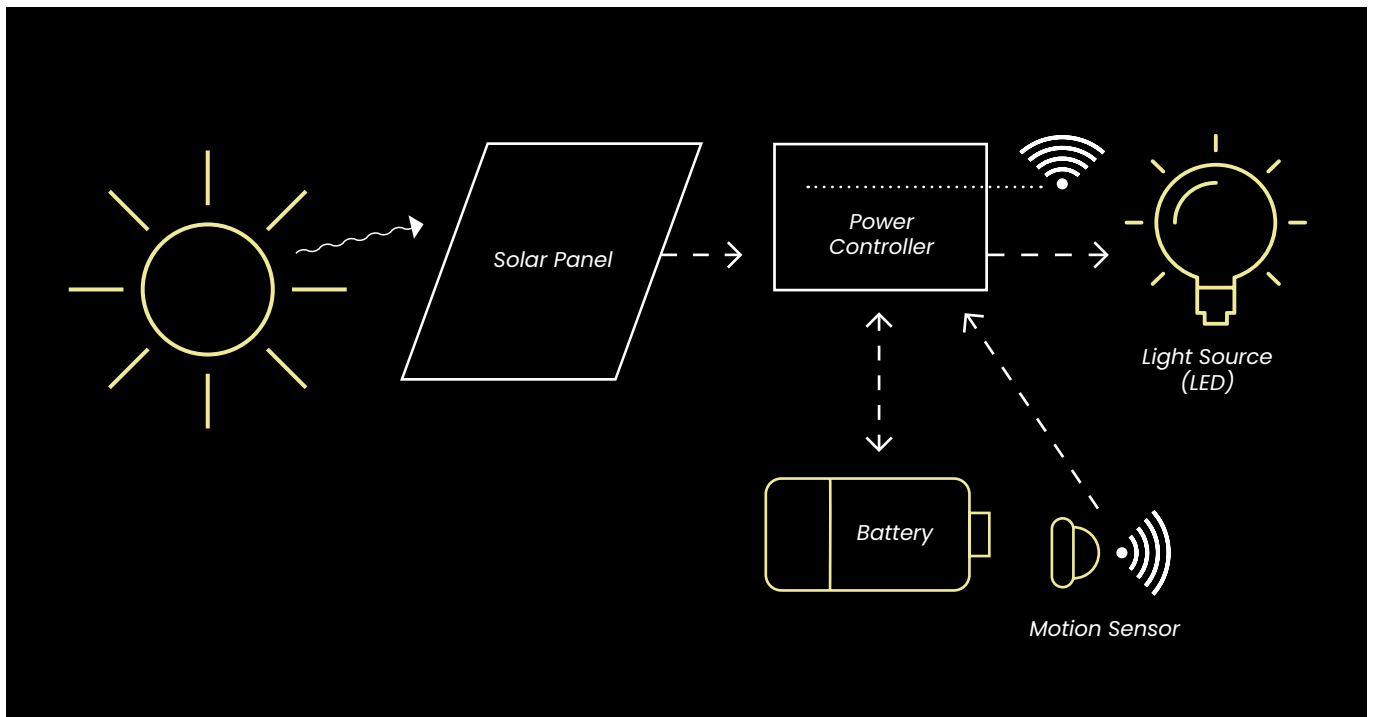
During the daytime the controller monitors the charged energy and handles charge up to 10W. When it gets dark the unit has counted the charged energy from the whole day.

This energy is then used to light after sun- set controlling the LED with up to 12W. Depending on what time of year and location.

SOLAR PANEL 44WP MONOCRYSTALLINE

44Wp panels including mono crystalline solar cells 5,16 Wp with anti-reaction coating that converts the maximum of light into energy.

The structured glass surface reduces reaction, resists wind and snow weather conditions.



Please recycle to local guidelines



Empowering energy solutions for street lighting and infrastructure

Sunio is a prominent importer of renewable energy solutions and has a rich history of pioneering sustainable practices and contributing to the clean energy transition in the United Arab Emirates. Founded in 2023 we embarked on a mission to introduce cutting-edge renewable technologies to the UAE market, promoting environmental consciousness and energy independence.

We recognized the growing need for sustainable energy alternatives in the UAE, considering the region's abundant natural resources and the global shift towards clean energy.

We are dedicated to sourcing and importing the latest renewable energy solutions from around the world. Working closely with renowned manufacturers and industry experts, we have curated a diverse portfolio of high-quality products, including solar street light solutions, solar panels, energy storage systems, and other sustainable technologies.

Through strategic partnerships and collaborations, we play a pivotal role in introducing and popularizing renewable energy solutions across the UAE. We actively engage with government entities, private enterprises, and individuals, raising awareness about the benefits of clean energy and facilitating its adoption on a large scale.

Driven by a vision of sustainability and a passion for environmental stewardship, we have actively contributed to the UAE's ambitious clean energy targets. By importing and providing access to advanced renewable technologies, we have helped the UAE reduce its carbon footprint, diversify its energy mix, and foster a more sustainable and resilient economy.

As a trusted importer of renewable energy solutions, we continue to empower individuals, businesses, and organizations to embrace clean energy alternatives, reduce their environmental impact, and contribute to a greener future for the UAE.