

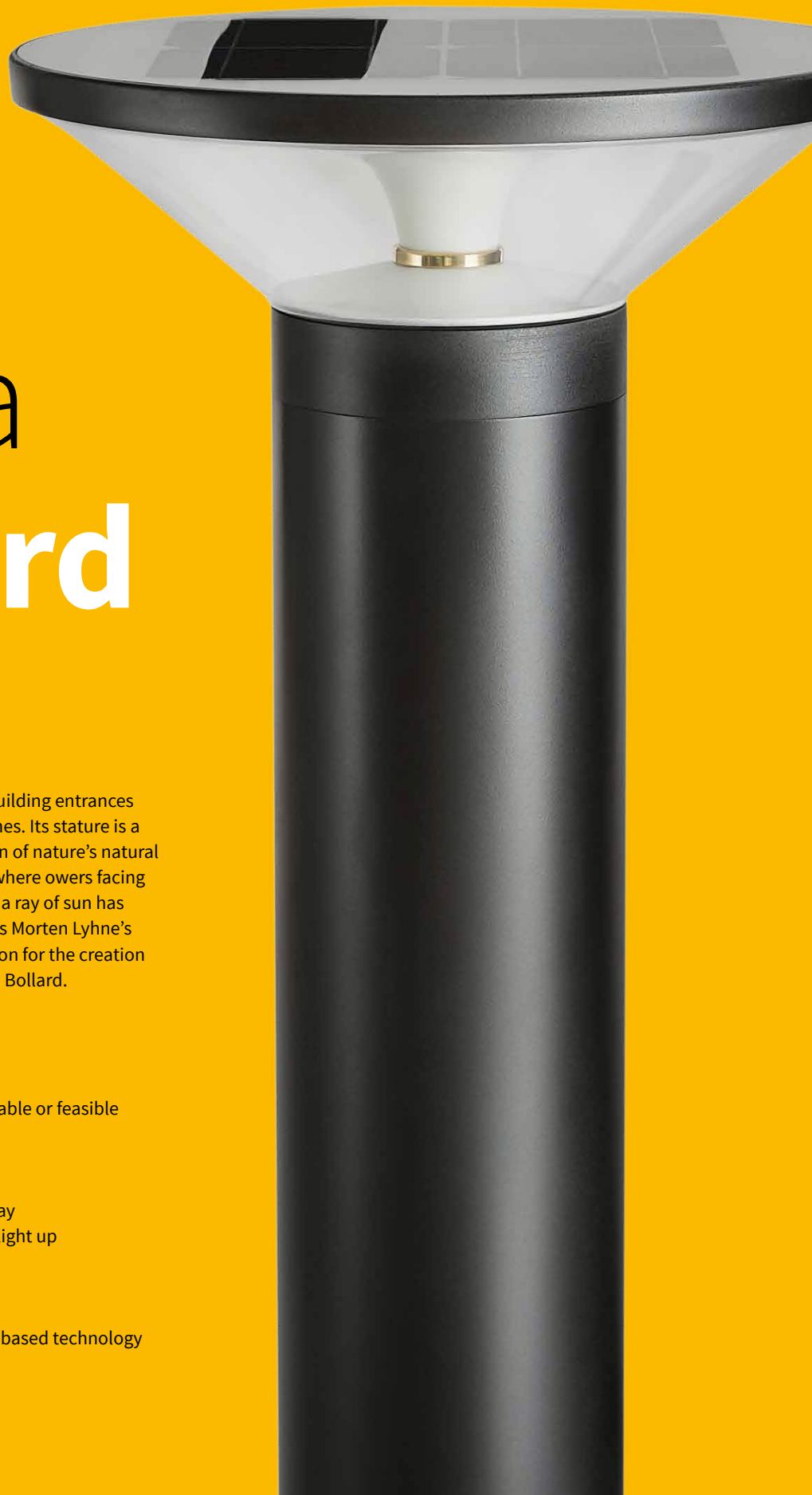
Asima Bollard

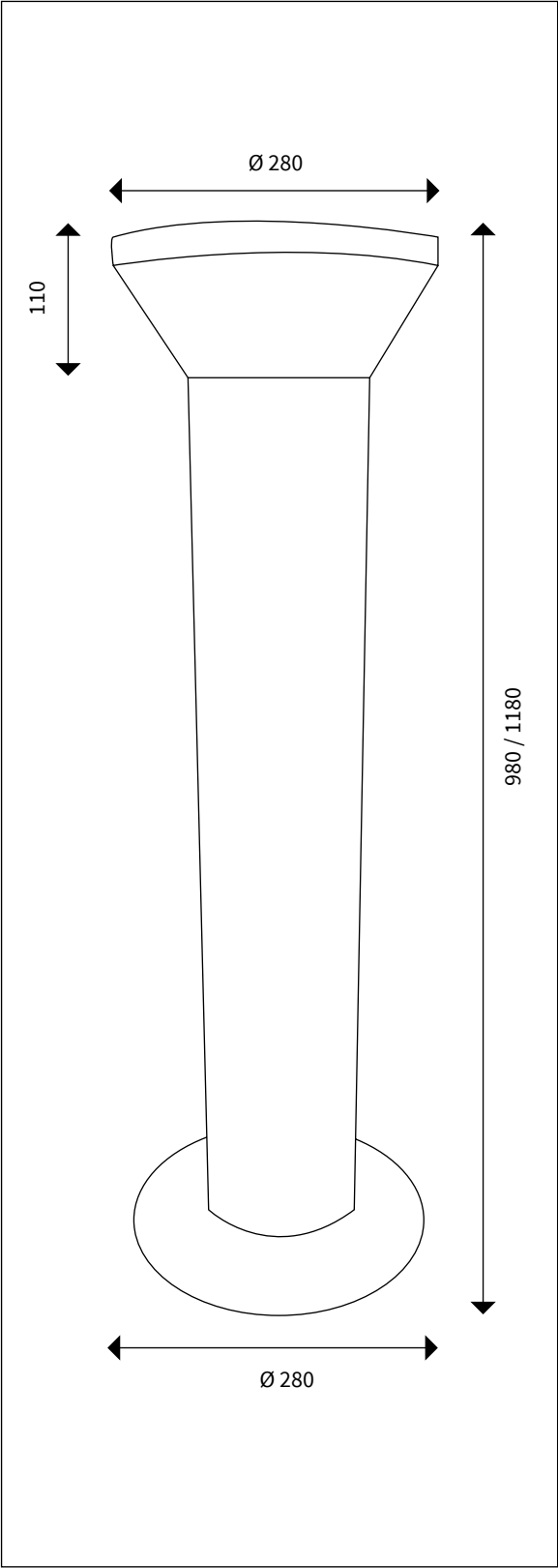
Asima Bollard is one of Suncil's most innovative and aesthetic beautiful looking Bollard designed by the Danish recognized lamp designer Morten Lyhne. Asima Bollard creates a warm glow suitable for

parks, building entrances and homes. Its stature is a reflection of nature's natural beauty where owers facing towards a ray of sun has served as Morten Lyhne's inspiration for the creation of Asima Bollard.

FEATURES:

- Stand alone solar powered LED bollard
- Light in areas where cabling is not available or feasible
- No cabling and excavation cost
- Safe navigation in remote areas
- Sustainable outdoor lighting
- Solar cells generate power during the day
- Power is consumed during the night to light up the luminaire
- Integration of sensor
- CO2 neutral
- Possible to integrate a variety of sensor based technology

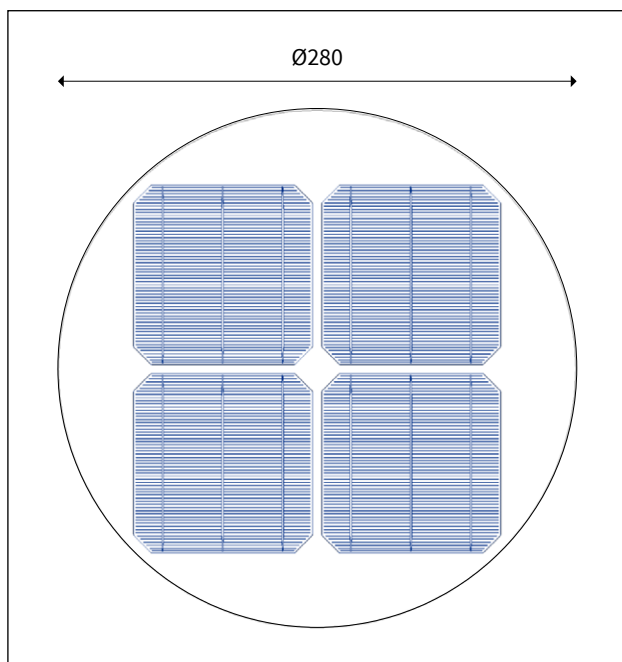




Luminaire	
Material	Top in cast aluminium, bollard in galvanised steel
Coating	Graphite Grey: SW302G (close to RAL 9007)
	Silver Grey: MW3000
	Corten Brown: Mars 2525, YX355F
Screen	Clear polycarbonate with UV-resistant acrylate on both sides
Mounting	Rooted or flanged base
Connection	Max 3 cables, 5x16 mm2
Classification	IP66, class II
Impact resistance	IK10
Weight	10 kg

LED and driver data	
Operational life	Min 100.000 hours at a max 25° C, L80B10
Total consumption	9 or 12 W (350 or 500 mA)
Colour temperature	2700, 3000 or 4000 Kelvin
Colour rendering	Min 90 Ra
Colour accuracy	3 steps SDCM
Output ratio	57%
Luminous power	2700 Kelvin, 500 – 2200lm, CLO
	3000 Kelvin, 550 – 2300 lm, CLO
	4000 Kelvin, 600 – 2350 lm, CLO
Driver	LED driver 350 or 500 mA
Operational life	Min 50.000 hours

Product Description



ASIMA BOLLARD BATTERY

The Asima Bollard 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 Asima Bollard it comes in two sizes, 3.6V-43Wh and 3.6V-86Wh. Pending on location and environment the solution will be designed accordingly.

ASIMA BOLLARD CONTROLLER

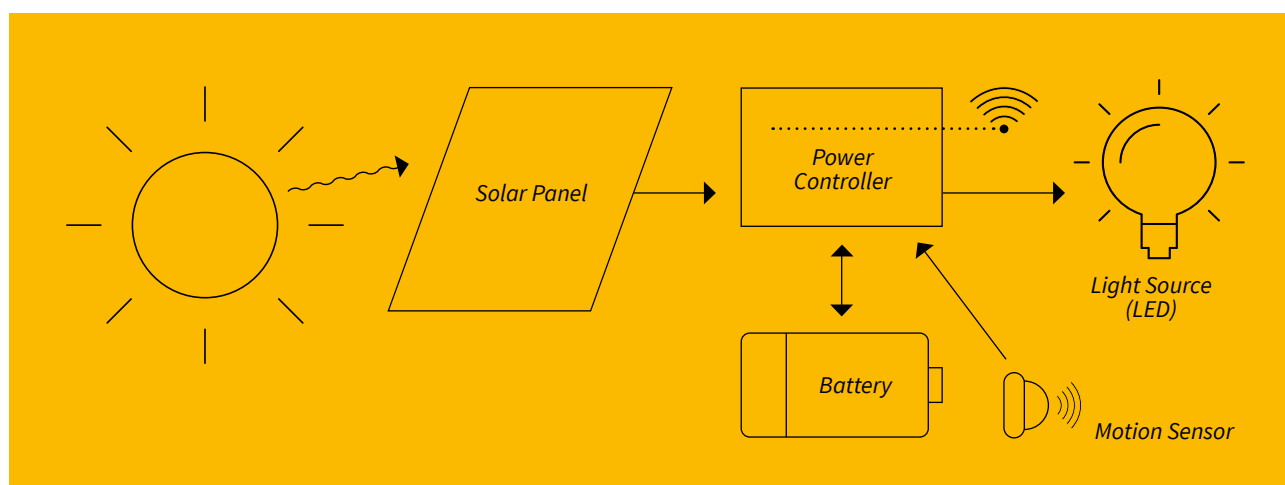
The controller in the Asima Bollard is the intelligent heart of the solution. The controller maximizes the energy available from the solar panel and uses the energy to charge a battery.

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 sunset controlling the LED with up to 12W. Depending on what time of year and location.

SOLAR PANEL 60WP MONOCRYSTALLINE

16Wp panel including 4 pcs. mono crystalline solar cells 4,16 Wp with anti-reflection coating that converts the maximum of light into energy.

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





Inspired by Nature, Powered by Sun

Suncil is a Danish based cleantech company providing micro solar energy to street lighting and infrastructure in EU, UAE and USA. The company is born out of the notion that humanity has a responsibility to deliver a greener, safer and smarter world to our children's generation in order to secure a sustainable world. We believe there is no time sitting around waiting for climate change to go away. We need to take matters into our own hands

and act now. That is the reason why we are working towards solving UN's 17 Sustainable World Goals as an integrated part of our business model. Climate change cannot be solved solely by a single company. Governments, institutions and businesses need to work together if our children should grow up in a lighter world. Suncil is leading the race of renewable energy, and wants you to join along. **Together, we create the future of tomorrow.**