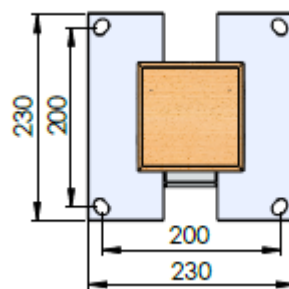
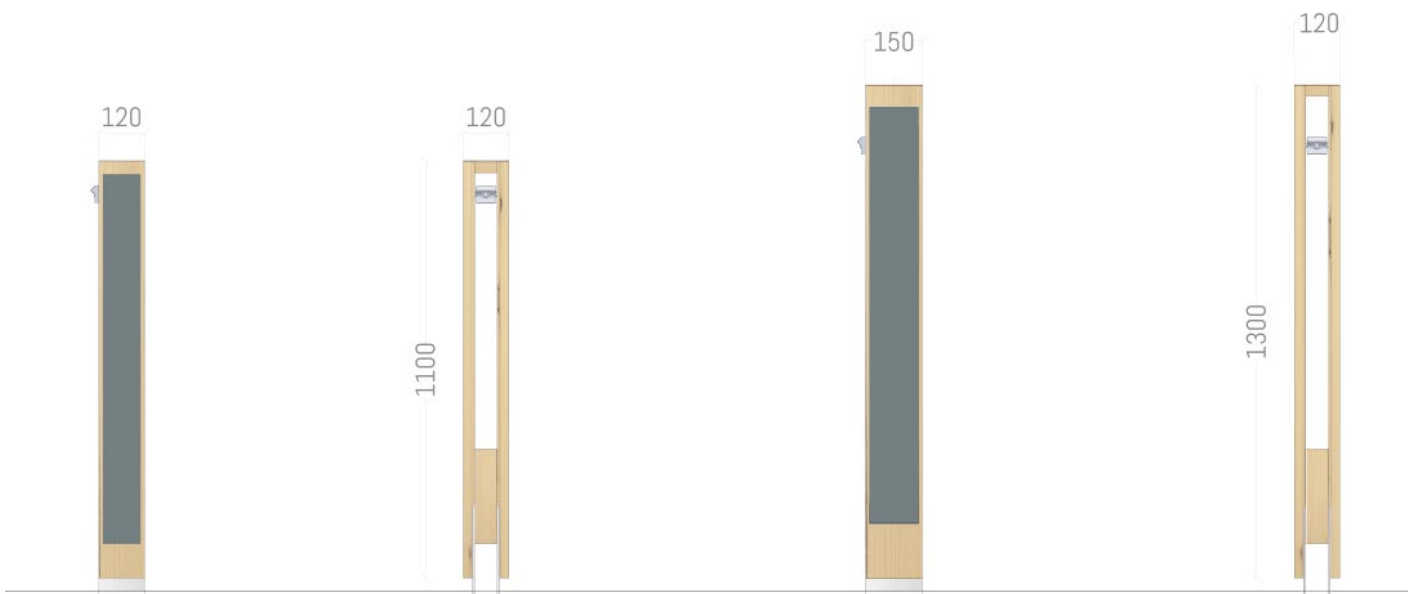


TYPE BB – SOLAR WOODEN BOLLARD

PRODUCT SHEET



Description

Wooden bollard for outdoor solar LED lighting

Lighting section

Choice of 2 optics

1/ OX Block

Block PMMA optics

LED power up to 2 W.

LED temperature 3000 K.

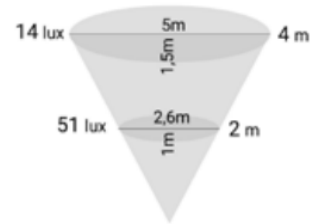
Lifespan: 50,000 hours (L90B50).

CRI > 80.

Photometry: Elliptical optic 30/60°.

Class III - IK10 - IP67 - CE.

Waterproof connector for connection to the control box.



2/ L8 Block

Machined aluminum optical block

LED power up to 4 W

LED temperature 3000 K.

Lifespan: 50,000 hours (L90B50).

CRI > 80.

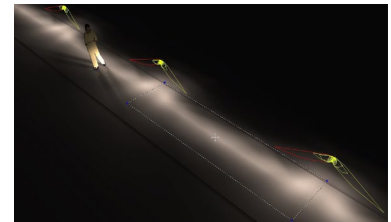
Photometry: **Elliptical optic 150/23°.**

Allows distances up to 15 m.

Class III - IK10 - IP67 - CE.

Waterproof connector for connection to the control box.

Compliant with the light pollution decree of December 2018.



Dimensions

Model BB 110 : Height 1100 mm, Width 130 mm

Solar panels. Quantity 2x3

Individual panel dimensions : 325x100 mm

Class III - IK10 - IP67 – CE

Model BB 130 : Height 1300 mm, Width 150 mm

Solar panels. Quantity 2x1

Individual panel dimensions : 1100x130 mm

Class III - IK10 - IP67 - CE

Frame

Made of Iroko wood or other materials upon request.
Minimum thickness of 20 mm.
Natural wood appearance. Unvarnished, so no varnish maintenance required.
Assembled with stainless steel screws and inserts.
Easy maintenance of active parts by unscrewing.
All screws of the product are made of 316L stainless steel. Fixation on the ground with a stainless steel base plate for concrete massifs

Solar cells

High-efficiency Sunpower Back Contact solar cells, 24%.
Lifespan exceeding 25 years.

Batteries

1/Model BB 110

1 LiFePO4 Battery. 9.6 V. 4.8Ah
Capacity : 46Wh
8000 Cycles - DoD 55%.
Lifespan : 22 years

2/Model BB 130

2 LiFePO4 Batteries. 9.6 V. 4.8Ah each
Total capacity: 92 Wh
8000 Cycles - DoD 55%.
Lifespan: 22 years.

All batteries, electronic cards, connections, and other electronic components are housed in IP67 resin-sealed enclosures. These enclosures are located inside a base box of the bollard.

Operating software

Algorithmic management by microprocessor ensuring :

- Optimal charge management and power calculation year-round considering latitude, season, and weather conditions, with MPPT technology.
- Battery discharge management to ensure operation for 365 nights per year.

Battery operating temperature measurement system integrated into the electronic card for protection and extended lifespan.

Battery charging temperatures: -10°C to +60°C.
 Operating temperatures: -30°C to +85°C.
 Minimum autonomy of 8 nights of lighting.

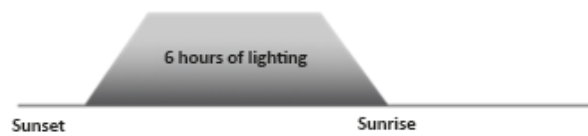
Bluetooth connection for product control via a smartphone application available on iOS and Android:

- Device ON/OFF function.
- Lighting scenario settings.

LIGHTING SCENARIOS

SCENARIO 1

Lighting for 6 hours starting from sunset.



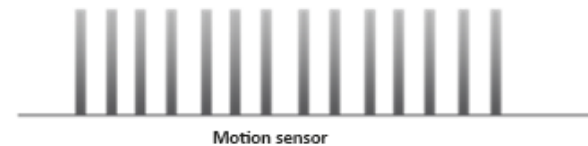
SCENARIO 2

Lighting for 4 hours after sunset and then 2 hours before sunrise



SCENARIO 3

From sunset to sunrise with motion detection (turn off after 2 minutes if no movement).



INSTALLATION

Information provided for guidance purposes.

Construct a concrete base with anchoring rods.
 Anchoring rods are not supplied.

Height of the BB bollard	1,1 m	1,3 M
Dimensions of the concrete base (length x width x height)	500 x 500 x 500 mm	500 x 500 x 500 mm
Anchor rod spacing	200 mm	
Rod diameter	18 L 400	