

Portland Solar Bollard

TECHNICAL SPECIFICATION



Sustainability
with style

asbac
solar 

PORTLAND 800 FM

SOLAR VANDAL BOLLARD



SBPV80-FM



The Portland bollard is designed and built to achieve the highest vandal-resistant rating, IK10+. The bollard is virtually impossible to break, making it the perfect choice for areas such as public spaces where vandalism may occur. In addition to this, it is fully waterproof (IP68) meaning it will withstand the harshest environments.

LED POWER		3 Watts
LUMINOUS FLUX		588 Lumens
LIGHTING		
Efficiency	196 Lumens/Watt	
Chips	Philips Luxeon	
LED Lifetime	Over 50000 Hours LM80	
Colour Temperature	5000K (2700K available on request)	
Light Height	800mm	
STORAGE		
Technology	Lithium Fer Phosphate LiFeP04	
Capacity	38 Wh	
Autonomy	Over 24 hours at full charge - 4 rainy days back up	
Charging Time	6 hours	
Lifespan	Over 3000 cycles @ 80% DOD Over 10 years lifetime	
Working Temp.	-40°C to 70°C	
ENERGY		
Solar Panel	6.3 wc	
Cells Type	Monocrystalline Panel Grade A 25 years	
Certificates	IEC 61215 ; IEC 61730 I and II ; IEC 60904	
ELECTRONIC		
Sensor	Microwave 270° Motion Sensor	
MECHANICAL		
Mounting	Flange Mount	
Material	Marine Grade Anodised Aluminium and Polycarbonate	
DIMENSIONS		
Unit size Ø x H	280 x 800mm	
Weight	5.2kg	



Parks & Gardens



Hiking Trails



Places



Car Parks & Rest Areas



Pathways



Campites

CERTIFICATION IEC / TUV / EMC / LM-79-08 and LM-80 test standards.



PORTLAND 450 FM SOLAR VANDAL BOLLARD



SBPV45-FM



The Portland bollard is designed and built to achieve the highest vandal-resistant rating, IK10+. The bollard is virtually impossible to break, making it the perfect choice for areas such as public spaces where vandalism may occur. In addition to this, it is fully waterproof (IP68) meaning it will withstand the harshest environments.

LED POWER		3 Watts
LUMINOUS FLUX		588 Lumens
LIGHTING		
Efficiency	196 Lumens/Watt	
Chips	Philips Luxeon	
LED Lifetime	Over 50000 Hours LM80	
Colour Temperature	5000K (2700K available on request)	
Light Height	450mm	
STORAGE		
Technology	Lithium Fer Phosphate LiFeP04	
Capacity	38 Wh	
Autonomy	Over 24 hours at full charge - 4 rainy days back up	
Charging Time	6 hours	
Lifespan	Over 3000 cycles @ 80% DOD Over 10 years lifetime	
Working Temp.	-40°C to 70°C	
ENERGY		
Solar Panel	6.3 wc	
Cells Type	Monocrystalline Panel Grade A 25 years	
Certificates	IEC 61215 ; IEC 61730 I and II ; IEC 60904	
ELECTRONIC		
Sensor	Microwave 270° Motion Sensor	
MECHANICAL		
Mounting	Flange Mount	
Material	Marine Grade Anodised Aluminium and Polycarbonate	
DIMENSIONS		
Unit size Ø x H	280 x 450mm	
Weight	4.2kg	



Parks & Gardens



Hiking Trails



Places



Car Parks & Rest Areas



Pathways



Campites

CERTIFICATION IEC / TUV / EMC / LM-79-08 and LM-80 test standards.



LUMINAIRE HOUSING & LEDS

3 WATTS - 588 LUMENS - 5000 K

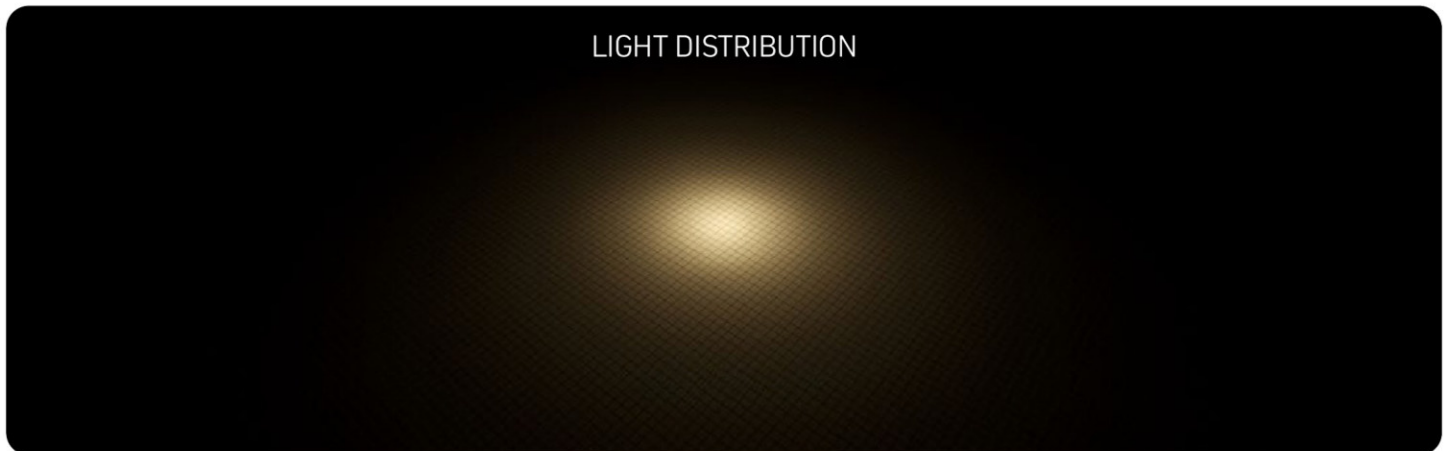
The high-housing and dome are constructed using SABIC Lexan polycarbonate, ensuring durability and protection against UV ray and a guarantee against yellowing for over 12 years. The luminaire's unique design and shape make it almost indestructible, and it effortlessly meets IK10+ certification standards.

The Portland is equipped with 10 Phillips LUXEON LEDs, each providing an impressive 196 Lumens per Watt. These LEDs are integrated into the upper part of the dome and come equipped with custom optics for exceptional light distribution.

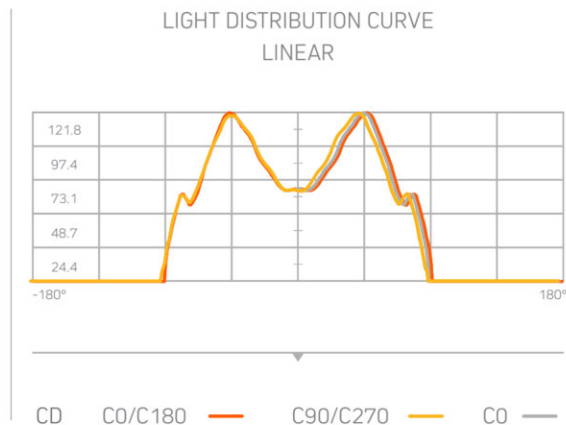
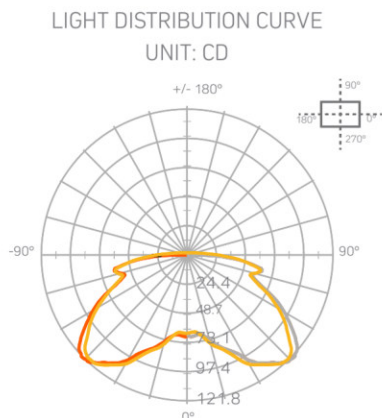


PORTLAND OPTICS

LIGHT DISTRIBUTION



LIGHT DISTRIBUTION CURVES



BATTERY LIFEPO4

OVER 10 YEARS LIFETIME

The Portland is equipped with Iron Phosphate Lithium LiFePo4 battery. This technology is proved to be the best chemical technology for solar application on the market.

With a cycle life of over 3000 Cycles @ 80% DOD, the battery enjoys over 10 years lifetime.

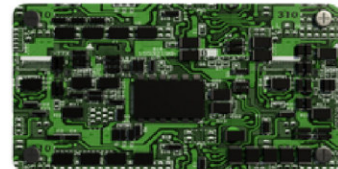


EXTREME TEMPERATURE
 - 10 °C TO 70 °C

The Standard Lithium LiFePo4 batteries enjoy a working temperature range from -10°C TO 70 °C.

BMS ELECTRONIC PROTECTION BATTERY MANAGEMENT SYSTEM

The batteries are equipped with electronic circuit boards for a higher protection, ensuring battery functioning optimization no matter the situation.



The BMS Protects against :

- OVER/UNDER CURRENT • OVERLOAD • OVER/UNDER VOLTAGE • OVER/UNDER CHARGE • TEMPERATURE MANAGEMENT

COMPARISONS OF DIFFERENT BATTERY TECHNOLOGIES

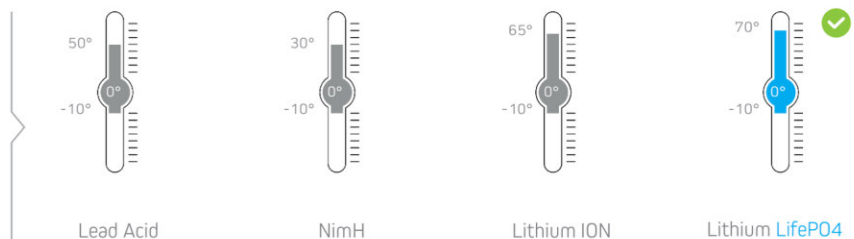
LIFETIME & CYCLES AT 80% DOD

Comparisons of different battery technologies



CHARGING TEMPERATURE RANGE WITHOUT CAPACITY LOSS

Minimum & Maximum temperature range for Optimal charging during the day

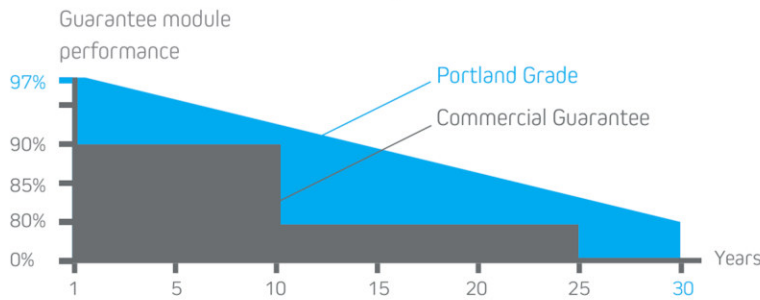


SOLAR PANEL

6.3 WATTS 6V

Encapsulated Monocrystalline Solar Panel Grade A Solar Cell with Tempered Glass.

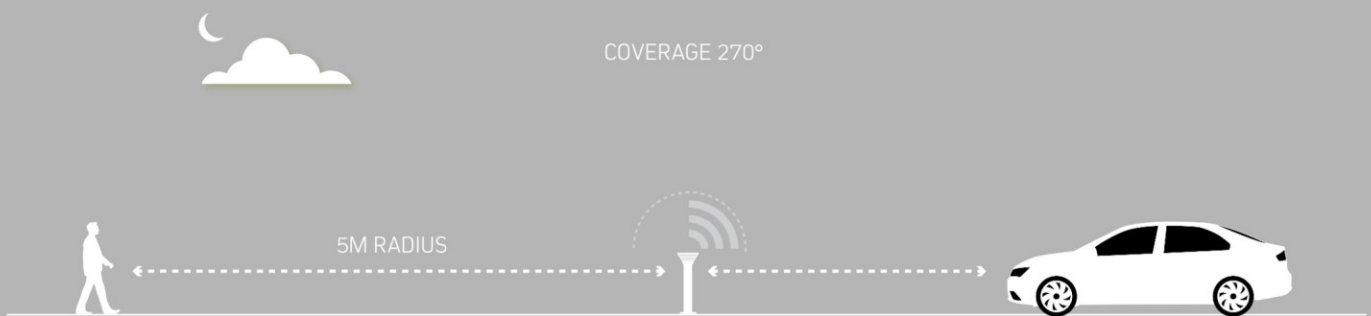
OUR PV PERFORMANCE GUARANTEE



MOTION SENSOR MICROWAVE

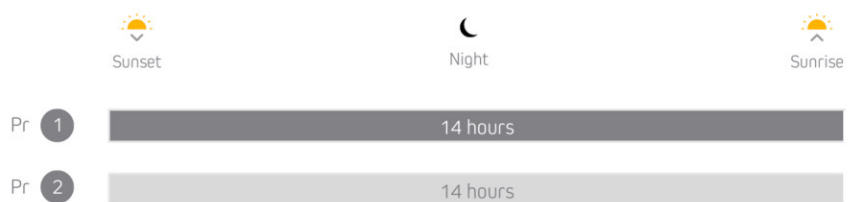
THE PHOTOSENSOR AUTOMATICALLY TURNS THE LIGHT ON AT DUSK AND OFF AT DAWN.

Microwave Motion Sensor with 270 coverage, invisible and integrated to the luminaire housing will detect any presence and turn the light to full power when triggered.



■ Program 1 - Standard option
30% Dlm + 100% Power for 20 sec when triggered

■ Program 2
20% Dlm + 100% Power for 20 sec when triggered



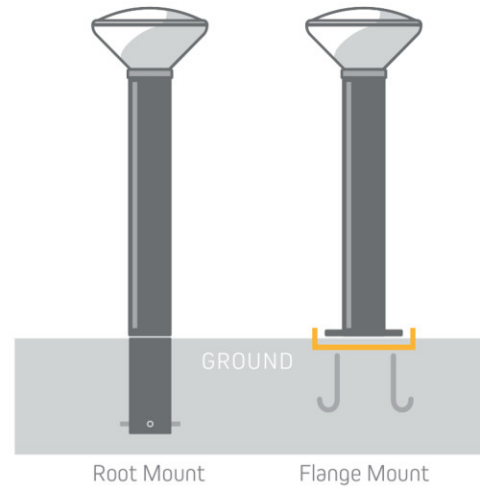
DIMMING PROGRAM & POWER CAN BE CUSTOMIZED TO YOUR GEOGRAPHICAL LOCATION FOR OPTIMAL EFFICIENCY

EASY INSTALLATION

NO CABLING, NO TRENCHING

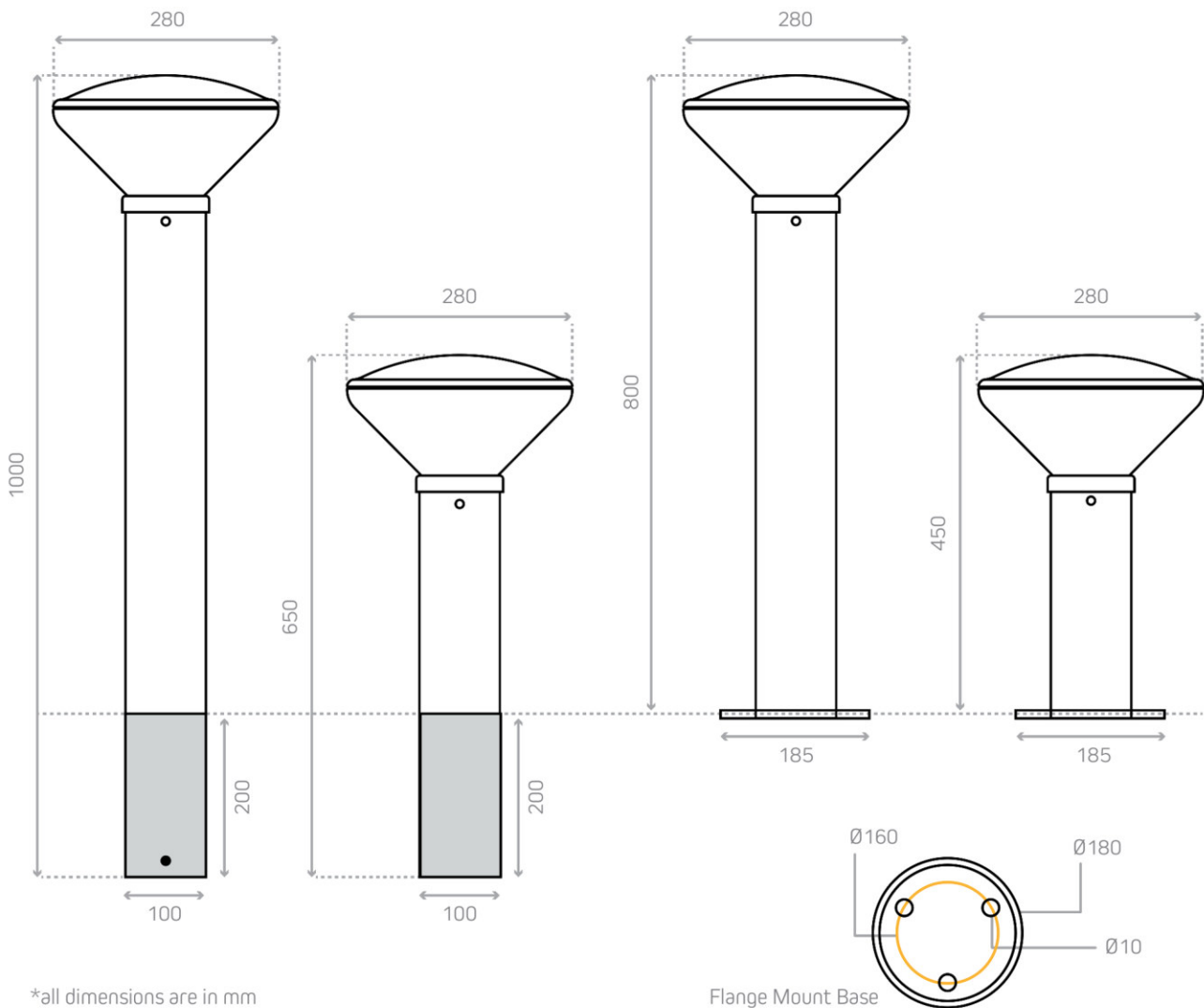
The Portland comes in two different mounting types, both requiring neither trenching or cabling for a fast and economical installation.

Simply insert the bollard into concrete or mount it on a concrete base.



DIMENSIONS*

SOLAR PANEL & LED



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