

**BULLARD
SOLAR**
One with the Sun

**TIRAS
SOLAR POST-TOP**





**BULLARD
SOLAR**
One with the Sun

CODE:
PL-009

FIXTURE TYPE: _____

PROJECT NAME: _____



Parks &
Gardens



Places



Car Parks &
Rest Areas



Pathways



Campsites

CERTIFICATIONS

**IEC / TUV / EMC / LM-79- 08
AND LM-80 TEST STANDARDS
/ IK8 / IP65 / CE / ETL**

**5
YEARS**

* Bullard Solar offers a 5 Year Limited Warranty Luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers all components when installed and operated according to Bullard Solar instructions.

Fixture suitable for ambient temperature from -10° to 50°.

PV Panels - 20 year performance warranty

Controller & Batteries: 5 years

Bullard Solar retains the right to modify or change product specifications without prior notice, as part of our ongoing commitment to improvement

GENERAL INFORMATION:

Our Solar Post-Top's sleek design is the perfect solution for Urban lighting. It meets a wide range of application needs from pathways, parks to compounds and so on as well as blends harmoniously into a wide variety of architectural contexts. Engineered to perform like conventional post top lighting, Bullard Solar Post-Tops feature high-performing LEDs fueled by Solar energy.

NOMINAL FLUX 2744 LUMENS
NOMINAL POWER 14 WATTS

LIGHTING

Efficiency 196 Lumens/Watts
Chips LED PHILIPS Luxeon 30-30 / 2300K to 6500K
LED lifetime Over 80 000 hours LM80
Optics/CCT T-III / T-V -- 2300 to 6500K
Light Height From 98.43" to 196.85" (From 2.5 to 5 Meters)

BATTERY

Technology Lithium Iron Phosphate LIFEPO4
Capacity 256 Wh
Autonomy Over 24 hours at full charge - 4 Rainy Days back up
Charging time 6-7 hours
Lifespan Over 3000 CYCLES @ 80% DOD over 10 years Lifetime
Working temp 14°F to 158°F (optional -40°F to 158°F) -10°C to 70°C (optional -40°C TO 70°C)

ENERGY

Solar panel 33 Watts /18V
Cells type Monocrystalline Panel Grade A
Certificates IEC 61215 - IEC 61730 I and II - IEC 60904

ELECTRONIC

Controller MPPT SMART CONTROLLER
Sensor Microwave 360° Motion Sensor
Cabling Waterproof Connector, Plug and Play
Protection Battery Management System (BMS)

MECHANICAL

Pole mounting 3.00" (76 mm)
Material Aluminium and Stainless Steel

DIMENSIONS

Product D 21.06" x 15.35"(D 53.5 cm x H 39 cm)
Carton size 22.83" x 22.83" x 17.00" (58 cm x 58 cm x 43 cm)
Net Weight 16,10 lb (7.3 KG)
Gross Weight 21,61 lb (9.8 KG)
QTY /CTN 20"/40"..... 135/300

ONE WITH THE SUN

sales@gordonbullard.com
www.bullardsolar.com
1-877-964-4646



991 South Gull Lake Dr
Richland, MI 49083
USA

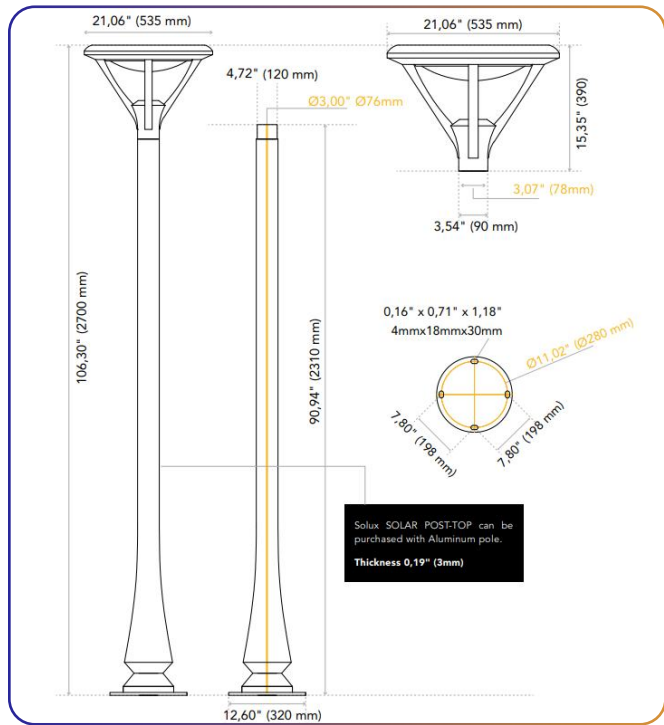
Due to the dynamic nature of lighting products and the associated technologies, luminaire data on all specification sheets is subject to change at the discretion of Gordon Bullard LLC and associated companies.

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Updated 07/09/2024

FIXTURE TYPE: _____

PROJECT NAME: _____



HOW TO ORDER:

CODE:

Example:
CODE: PL-009-BL-30K

PL-009-BL-30K

1

DIMENSIONS:

D 21.06" x 15.35" (D 53.5 cm x H 39 cm)

2

FINISH OPTIONS:

-BL

-BL Black

3

CCT:

-23K 2300K
-30K 3000K
-40K 4000K
-50K 5000K
-65K 6500K

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LUMINAIRE HOUSING & LEDS

2744 LUMENS - 2300 TO 6500 K

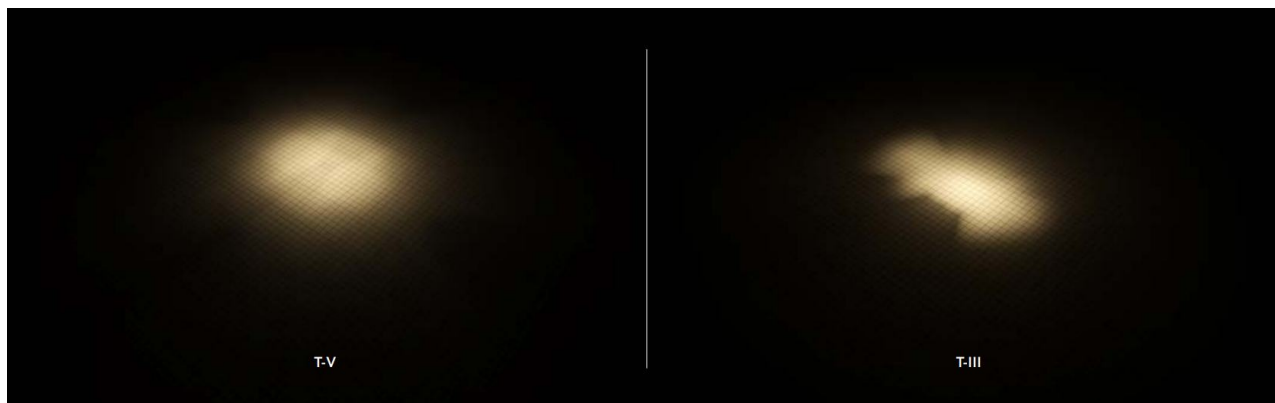
High pressure die-cast low-copper aluminum. Protection class (IP65). Bullard Solar uses a high quality Polyester Powder Coating from AKZO NOBEL. This powder coating provides an excellent salt and humidity resistance as well as ultra violet resistance for color retention for this product.

Our Luminaire is equipped with PHILIPS LUXEON HE PLUS High efficiency Chips offering and overall 196 Lumens per Watt efficacy. Our luminaire also complies with the DARK SKY requirement for light pollution with an Upward lighting of 0,71%.

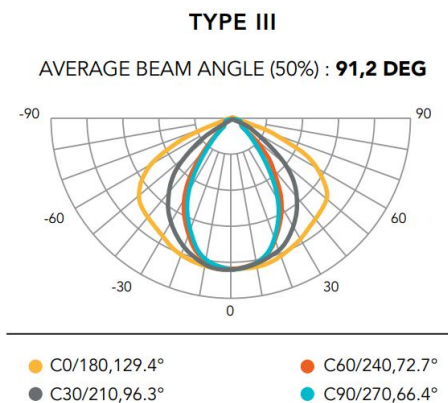
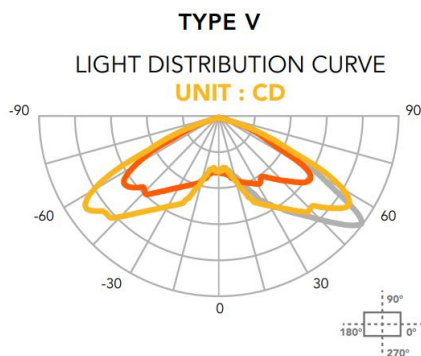


DIFFERENT OPTICS *

Our different optics will allow you to optimize the lighting results of your projects



LIGHT DISTRIBUTION CURVES



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+ OVER 10 YEARS LIFESPAN

The POST-TOP Series 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

14°F to 158°F (-40°F OPTIONAL)
-10°C TO 70°C (-40°C OPTIONAL)

When Standard Lithium LiFePo4 batteries enjoy a working temperature range from 14°F to 158°F (-10°C TO 70 °C). Bullard Sollar offers as optional a new Special LIFEPO4 battery with working range of -40°F to 158°F (-40 °C. to 70 °C).

BMS ELECTRONIC PROTECTION BATTERY MANAGEMENT SYSTEM

Our 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

BATTERY LIFEPO4



COMPARISONS OF DIFFERENT BATTERY TECHNOLOGIES

LIFETIME & CYCLES AT 80% DOD*

Comparison of different battery technologies


Lead Acid
200

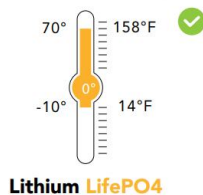
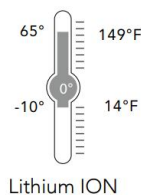
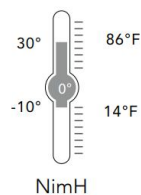
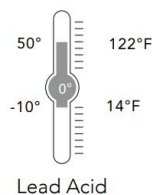

NimH
700


Lithium ION
800


Lithium LifePO4
3 000

CHARGING TEMPERATURE RANGE WITHOUT CAPACITY LOSS

Minimum & Maximum temperature range for
Optimal charging during the day



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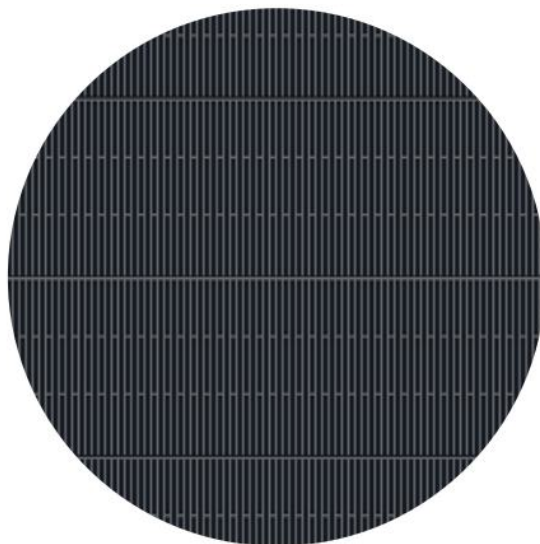
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SOLAR PANEL

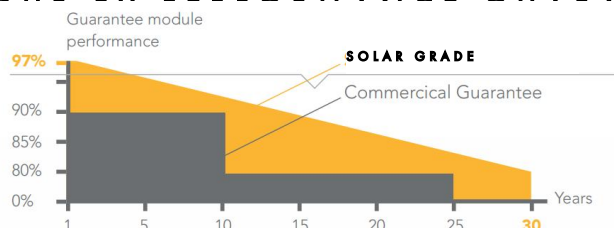
33 WATTS

High efficiency mono-crystalline Solar panels. Carefully selected Grade A Solar cells. Up to 20.4% efficiency, all protected by self-cleaning tempered glass at 30 degrees of inclination. They are also equipped with fully waterproof Plug and Play connectors for easy maintenance.

solar cells
GRADE A



PERFORMANCE GUARANTEE



CONTROLLER MPPT



**WATERPROOF CONNECTORS
"PLUG & PLAY"**

All our components are assembled **seamless and easy to access**

In a search for performance and reliability, our products are equipped with MPPT technology controller offering the best charging efficiency on the market up to 98%

REMOTE CONTROL MONITORING

In order to facilitate all maintenance operations and above all to diagnose any possible problem, without having to intervene mechanically on the luminaire, BULLARD SOLAR luminaires are equipped with a wireless diagnostic system via remote control



**With a simple click it is possible
to have real-time information such as:**

- Automatic diagnosis in case of malfunction
- State of charge and battery history
- Real Time load and solar panel energy production history
- Age of the product and installation Temperature and its history

FEATURES

- Minimal stand-by power consumption
- Current consumption $\leq 10\text{mA}$
- Intelligent battery management

3 Phases charging:

- Charge MPPTT
- Constant voltage
- Floating voltage

- Intelligent LED driver Auto detecting of Dusk and Dawn for automatic operation, 7 Lighting Programs Configuration.
- ANTI BLACK OUT: Load adjust according to battery capacity assuring all night long lighting in any weather conditions.
- The controller also acts against:

- OVERLOAD
- OVERCURREN
- OVERTEMPERATURE
- OVERVOLTAGE / OVERLOAD
- OVERDISCHARGE

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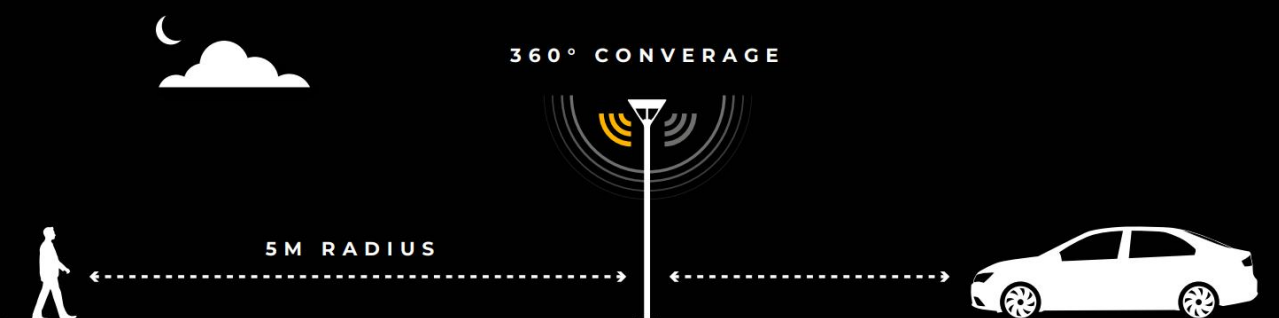
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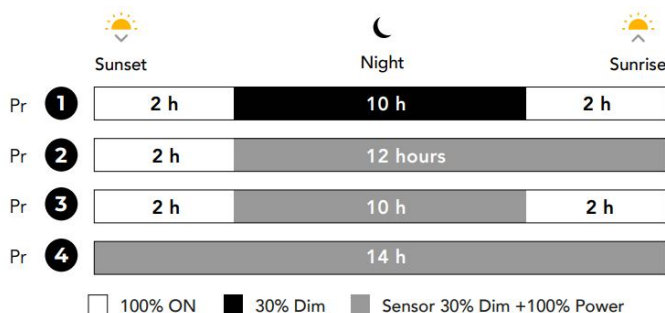
MOTION SENSOR MICROWAVE

Our Solar Post-Top comes with microwave motion sensors that detect pedestrians, cyclists and vehicles. The light level increases as they pass to ensure safety and security while respecting the environment



OPERATION MODE & LIGHTING SCHEDULE

In addition to automatic switching on and off , you have the possibility of choosing among different modular operating modes according to the needs of the project.



CONTACT US FOR MORE PROGRAM OPTIONS

EASY INSTALLATION NO CABLING NO TRENCHING

No cabling or teaching is required, Easy to install.
Insert on pole and switch ON.



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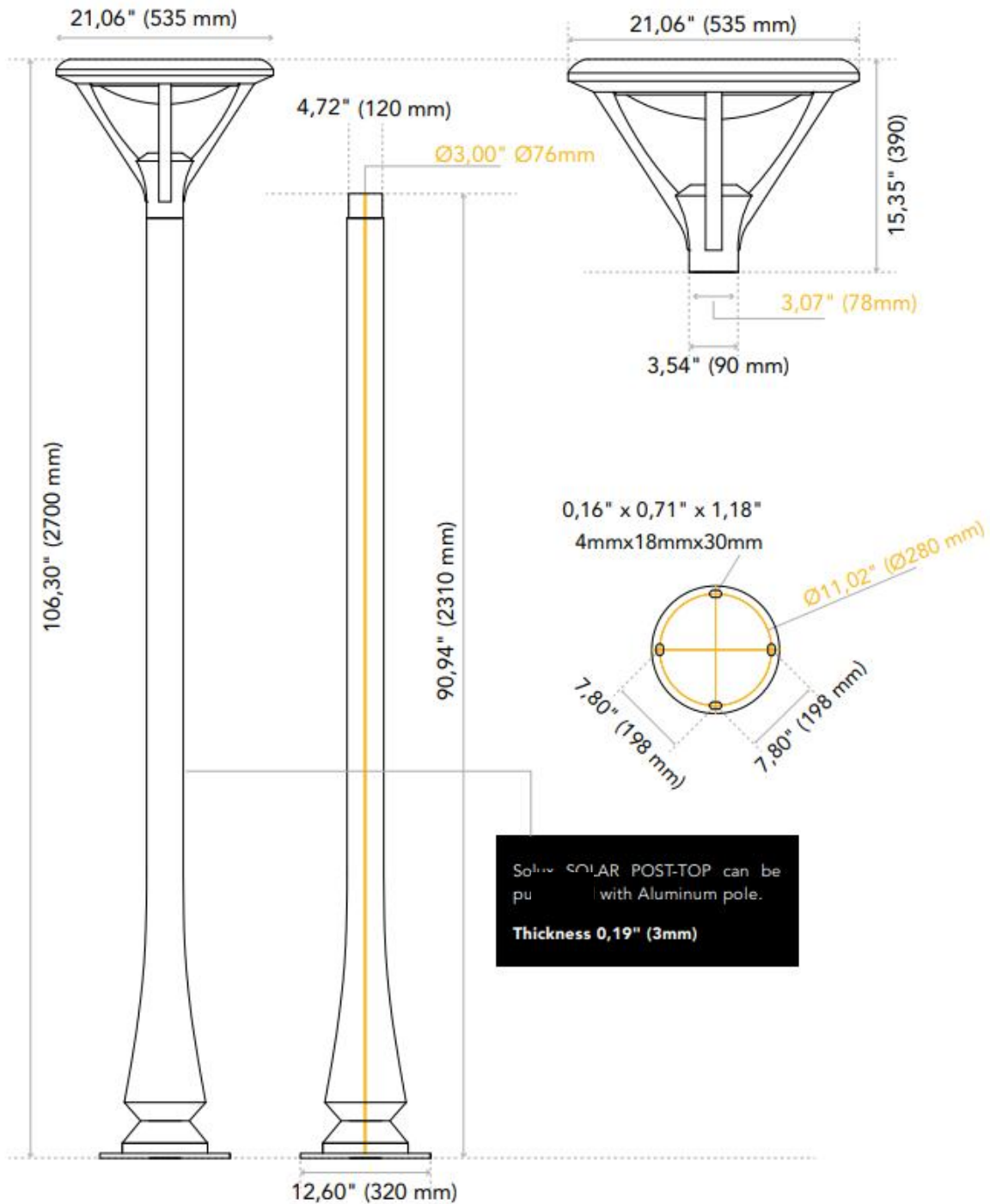
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DIMENSIONS*



*All dimensions are in mm

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