



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, Beyond Solar Post-Tops feature high-performing LEDs fueled by Solar energy.

NOMINAL FLUX **3920 LUMENS**
NOMINAL POWER **20 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**
Recommended Installation Height **From 9.8 to 16.4 Feet**

BATTERY

Technology **Lithium Iron Phosphate LIFEPO4**
Capacity **320Wh**
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)**

ENERGY

Solar panel **45 Watts /18V**
Cells type **Monocrystalline Panel Grade A 25 years**
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 **2.9 Inches**
Material **Aluminium and Stainless Steel**

DIMENSIONS

Product **D 23.6 x H 18.7 Inches**
Carton size **26.7 x 26.7 x 22 Inches**
Net Weight **22.2 Lbs**
Gross Weight **29.7 Lbs**
Qty /Ctn 20"/40" **96/204**

Model Number **AVS-PL9510**
SKU **786703**

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



CERTIFICATIONS

IEC / TUV / EMC / LM-79- 08 and LM-80 test standards / IK8 / IP65 / CE / ULOR

LUMINAIRE HOUSING & LEDS

3920 LUMENS - 2300 TO 6500 K

High pressure die-cast low-copper aluminum. **Protection class (IP65)**. Beyond 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.

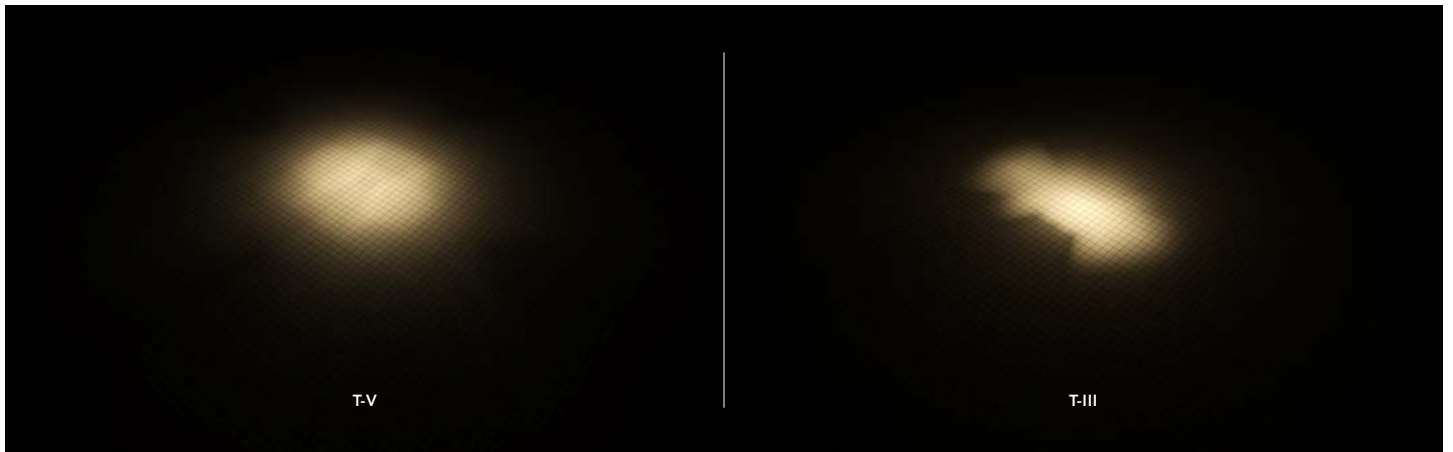
Our Luminaire is equipped with **PHILIPS LUXEON HE PLUS** High efficiency Chips offering and overall **196 Lumens per Watt efficacy**.

Our luminaire also complies with the **DARK SKY** requirement for light pollution with an **Upward lighting of 0,71%**.

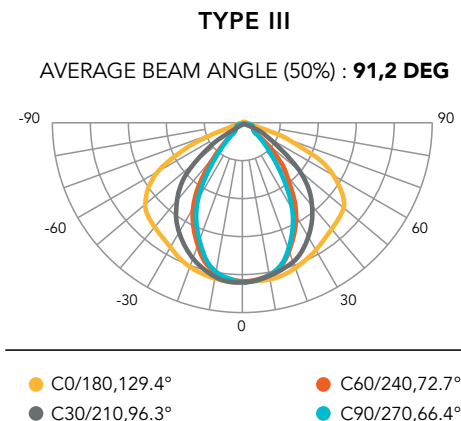
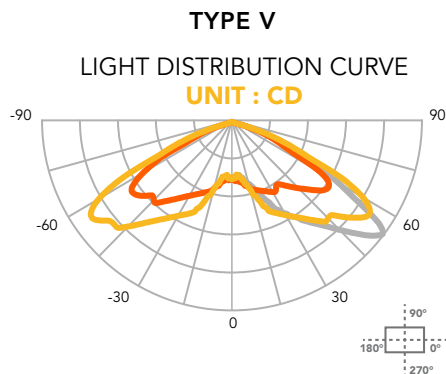


DIFFERENT OPTICS*

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



LIGHT DISTRIBUTION CURVES



BATTERY LIFEPO4

+OVER 10 YEARS LIFETIME

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.**

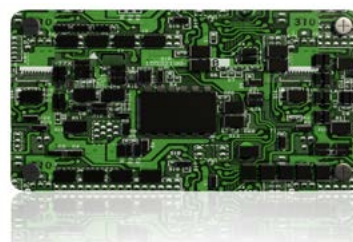


EXTREME TEMPERATURE 14 °F TO 158 °F (-40 °F OPTIONAL)

When Standard Lithium LiFePo4 batteries enjoy a working temperature range from **14°F TO 158 °F**. Beyond Solar offers as optional a new Special LIFEPO4 battery with working range of **-40 °F. to 158 °F**.

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

COMPARISONS OF DIFFERENT BATTERY TECHNOLOGIES

LIFETIME & CYCLES AT 80% DOD*

Comparison of different
battery technologies



Lead Acid
200



NimH
700



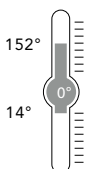
Lithium ION
800



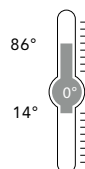
Lithium LifePO4
3 000

CHARGING TEMPERATURE RANGE WITHOUT CAPACITY LOSS

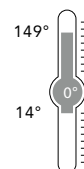
Minimum & Maximum temperature range
for Optimal charging during the day



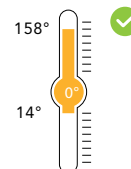
Lead Acid



NimH



Lithium ION



Lithium
LifePO4

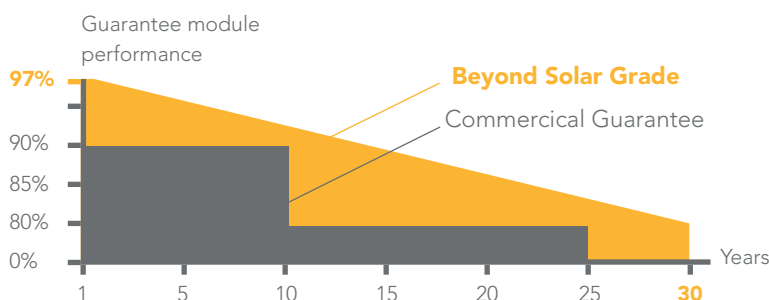
SOLAR PANEL

45 WATTS

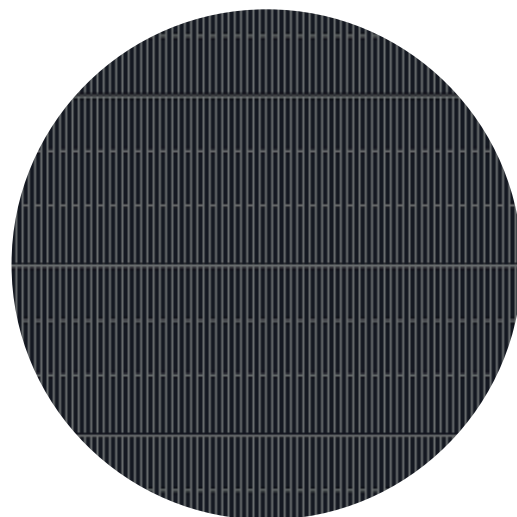
High efficiency mono-crystalline **Solar panels**. Carefully selected Grade A Solar cells. Up to 20.4% efficiency, all protected by self-cleaning **tempered glass at 30 degrees** of inclination.

They are also equipped with fully **waterproof Plug and Play connectors for easy maintenance**.

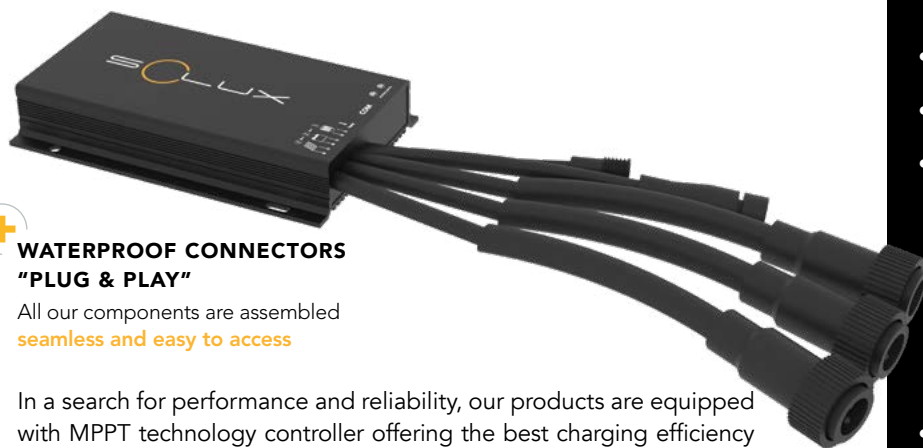
OUR PV PERFORMANCE GUARANTEE



solar cells
GRADE A



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, **Solux 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

**Remote control not included*

FEATURES

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

- **Charge MPPT**
- **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.

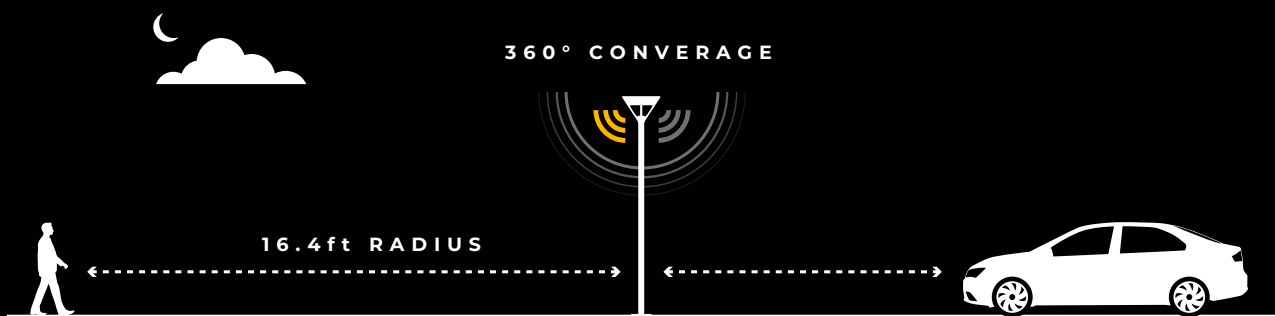
- The controller also acts against:

- **OVERLOAD**
- **OVERCURRENT**
- **OVERTEMPERATURE**
- **OVERVOLTAGE / OVERLOAD**
- **OVERDISCHARGE**

MOTION SENSOR MICROWAVE

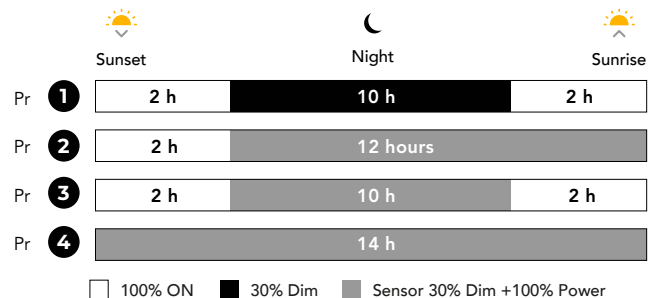
Our Solar Post-Top comes with microwave motion sensors that detect pedestrians, cyclists and vehicles.

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.



DIMENSIONS*

