













Specifications

Model #	SKU#	Power	PV Type	Solar Panel	Lithium Battery	Lumens	Pole Height	IP Rating	Material
AVS-CAPE-20W	789112	20W	MONO	72W/18V	24AH 12.8V	3000 LM	10.4987 FT	IP66	ALUMINUM
AVS-CAPE-40W	789111	40W	MONO	135W/18V	49AH 12.8V	6000 LM	16.4042 FT	IP66	ALUMINUM
AVS-CAPE-2X20W	789113	2X20W	MONO	135W/18V	49AH 12.8V	2 X 3000 LM	16.4042 FT	IP66	ALUMINUM



Correlated Color Temperature

5000K



Cool White Neutral White Warm White



















Optimal component calibration and intelligent management system



UNEQUALED LIFETIME

Selection of the latest and best component technology



EXTREME TEMPERATURE

Resistant -4°F to 149°F



WORLDWIDE WARRANTY

We offer a 5 years warranty on all the components













Product Design and Benefits















Components & Advantages

BATTERY LITHIUM LIFEPO4

The Eco-friendly and safe LiFePO4 battery improves the cyclic charge and discharge over 2000 times and has a life span of more than 10 years.



BATTERY MANAGEMENT SYSTEM

Electronic Algorythm Protection and battery management system for best use of the battery capacity.



MULTI PROTECTION















MPPT / SMART CONTROLLER 97% CHARGING EFFICIENCY

MPPT (Maximum Power Point Tracking) controller automatically track the maximum power point according to the weather variation.

Charging rate: 16-30%



FEATURES

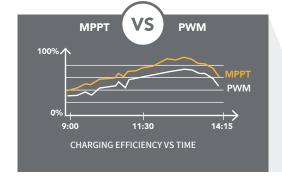
- · Maximum power point tracking charging
- Auto identify day/night
- 4 levels dimming design
- Smart mode operation
- Waterproof IP66





CONTROL MONITORING

- Check the state of the battery
- · Check the charging history
- Settle different running time slots
- Issue diagnostic















Installation

EASY INSTALLATION INSERT ON THE POLE, **ORIENTATE & CHOOSE YOUR TILT**

With a well designed bracket support all the models are very easy and flexible to install on the pole. This model also allow you to choose the orientation and the tilt of the PV panel.



LUMINAIRE HOUSING

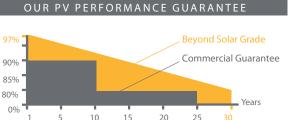
High pressure die-cast low-copper aluminum. Protection class IP66. We use a high quality Polyester Powder coating from AKZO NOBEL.



SOLAR PANEL 72 TO 135 WATTS

Solar panels high quality monocrystalline solar cells grade A. Solar panel efficiency up to 19.4%. 5 busbars cells for a better collected current capability. Full IP67 including the junction box

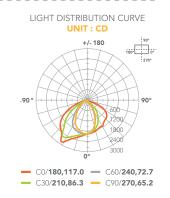




LED LIGHTING FROM 4500 TO 12000 **LUMENS**

PHILIPS

Combined with heat dissipation design, pure aluminium lamp base with seal lense for an optimal lighting and life span. Batwing lens for a perfect illumination and uniformity.



MICROWAVE MOTION SENSOR

360° coverage, invisible and integrated to the luminaire housing. 26.2ft wave radius.



OPERATION MODE

THE PHOTOSENSOR WILL AUTOMATICALLY SWITCH ON & OFF THE LIGHT FROM DUSK TO DAWN.













Technical Specifications

MADE FROM THE **HIGHEST COMPONENTS** We selected the best components for the highest level of performance and durability AVS-CAPE-20W AVS-CAPE-40W AVS-CAPE-2X20W 20 WATTS 40 WATTS 2*20 WATTS *3000 LUMENS 3000 LUMENS 6000 LUMENS **LUMINOUS FLUX** LIGHTING 150 LUMENS / WATTS **PHILIPS** LUXEON OVER 50000 HOURS LM80 120 DEGREE 10.5 ft 16.4 ft 16.4 ft STORAGE LITHIUM IRON PHOSPHATE LIFEPO4 18650 INCLUDING BATTERY MANAGEMENT SYSTEM BMS 24 AH 12.8 VOLTS 49 AH 12.8 VOLTS 49 AH 12.8 VOLTS OVER 24 HOURS AT FULL CHARGE - 4 RAINY DAYS BACK UP 6-7 HOURS OVER 2500 CYCLES - 8 TO 10 YEARS LIFETIME EN 61427 MSDS ENERGY 72 WATTS /18V 135WATTS /18V 135 WATTS /18V MONOCRYSTALINE PANEL GRADE A 25 YEARS IEC 61215; IEC 61730 I AND II; IEC 60904 ELECTRONIC **MPPT SMART CONTROLLER MICROWAVE 360 DEGREE MOTION SENSOR** WATERPROOF CONNECTOR, PLUG AND PLAY



DIMENSIONS



EN 55015; EN 61000























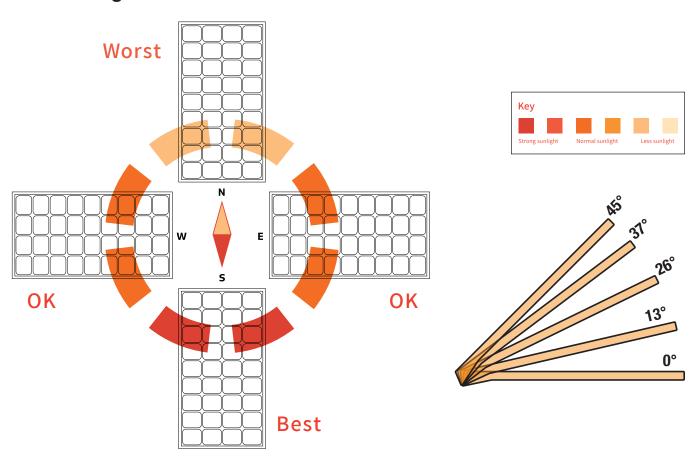
Optimum Panel Orientation

The Solar charge in a battery pack won't last forever. The off–grid system relies on stored solar energy for autonomy. Angling your solar panels properly can boost the power intake of your solar lighting system. You want to angle your solar panels at a tilt based on the area's latitude.

Tip for Maximum Power

You can increase the tilt 15° in the winter or decrease 15° in the summer. In this way you can get the maximum sunlight to recharge the battrey.

Best Facing Direction of Solar Panel



The area will dictate the installation of the fixtures and will sometimes prevent the lights from facing south. Panels facing West & East won't get as much light as Southern facing panels, but will stillcollect a good amount of sunlight. A North facing panel also works, but it will take longer to charge than any other direction. This would mean that the solar charge will be less optimal if installations are facing North.













Optimum Panel Orientation

