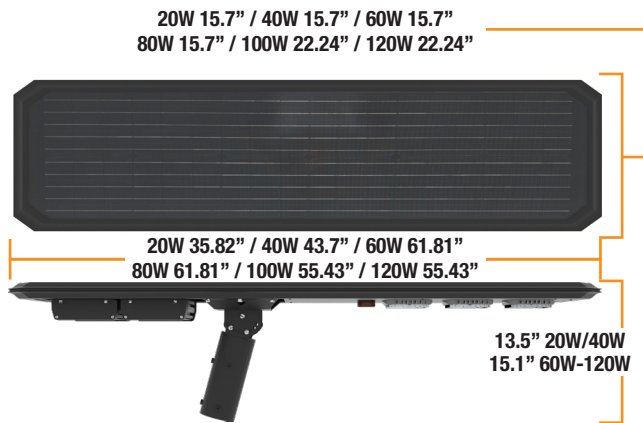


Solar All in One PRO Street Light



Our All in One Pro Series is economical, easy to install, completely off grid, unique new design with all the solar lighting advantages is great solution for area such as pathway, parking lot, roadway, trails or any remote area that have no access to conventional Power. Our all in one PRO series features an integrated solar panel, battery and Light fixture with easy to install mounting eliminates trenching to bury electrical wires and the savings continues since there is no monthly electrical bill.

- Economical, Easily to install, all in one integrated with fixture on one side and panel on the other side.
- Philips High Efficiency LEDs with heat dissipation design, pure aluminum lamp base with seal lens for an optimal lighting and life span.
- Batwing Lens for a perfect illumination and uniformity
- The light automatically switches on at dusk and switches off at dawn. 30% permanent lighting, when motion is detected power turns to 100%.
- Eco-Friendly and safe LifePO4 battery and discharge over 2000 times has life span of more then 10 years
- MPPT controller automatically track the maximum power point according to the weather variation, charging rate 16 to 30%
- 140 Lumen per watt and IP65 Rated
- 5 Years warranty on all components

Features

- IP68 Rated
- Anti Black Out Intelligent Management
- Extreme Temp Rating: -4°F to 149°F
- 97% Charging Efficiency
- Battery Life Span Over 10 Years
- IR Remote Control Monitoring
- Anti-Theft Hardware
- 4 Levels of Dimming Design & Auto Identify Day/Night



Solar All in One PRO Street Light

Specifications

Model #	SKU #	Power	PV Type	Solar Panel	Lithium Battery	Lumens	CCT	Charge Time (Hrs)	Weight (Lb)	Installation Height (Ft)
AVS-PRO-20W	990101	20W	MONO	60W	18AH	2800LM	5000K	6-7 Hrs	27.5	15
AVS-PRO-40W	990102	40W	MONO	72W	24AH	5600LM	5000K	6-7 Hrs	34.78	20
AVS-PRO-60W	990103	60W	MONO	105W	42AH	8400LM	5000K	6-7 Hrs	51.8	20
AVS-PRO-80W	990104	80W	MONO	105W	52AH	11000LM	5000K	6-7 Hrs	54.01	25
AVS-PRO-100W	990106	100W	MONO	140W	62AH	14000LM	5000K	6-7 Hrs	60.17	25
AVS-PRO-120W	990107	120W	MONO	140W	72AH	16800lm	5000K	6-7 Hrs	62.37	30

ALL YOU NEED IN ONE SOLAR LIGHT



+ EASY MAINTENANCE
with a direct access to battery and controller.

ORIGINAL NEW DESIGN

Applications

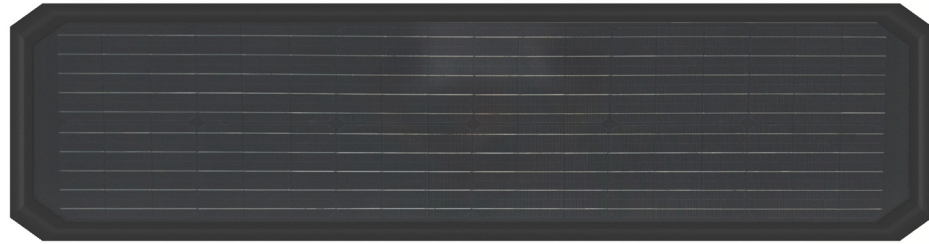
- Apartment Complex
- Office Buildings
- Pathways
- Parking Lots
- Highways
- Sidewalks

+ HEAT-SINK HOLE
Perfect heat dissipation of the battery and components with natural air flow

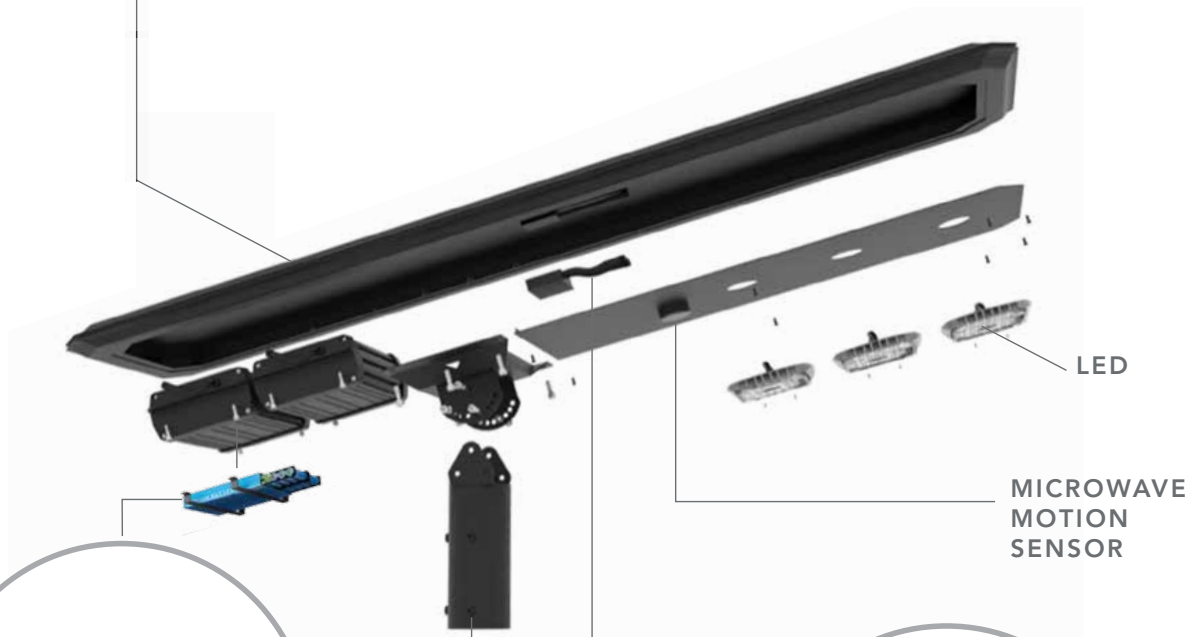


Solar All in One PRO Street Light

Product Design and Benefits



SOLAR PANEL



LED

MICROWAVE
MOTION
SENSOR

ANTI-THEFT
SCREWS



SAFE
No explosion risk

BATTERY
LITHIUM LIFEP04



MPPT / SMART CONTROLLER
97% CHARGING EFFICIENCY

SOLAR AREA LIGHTS

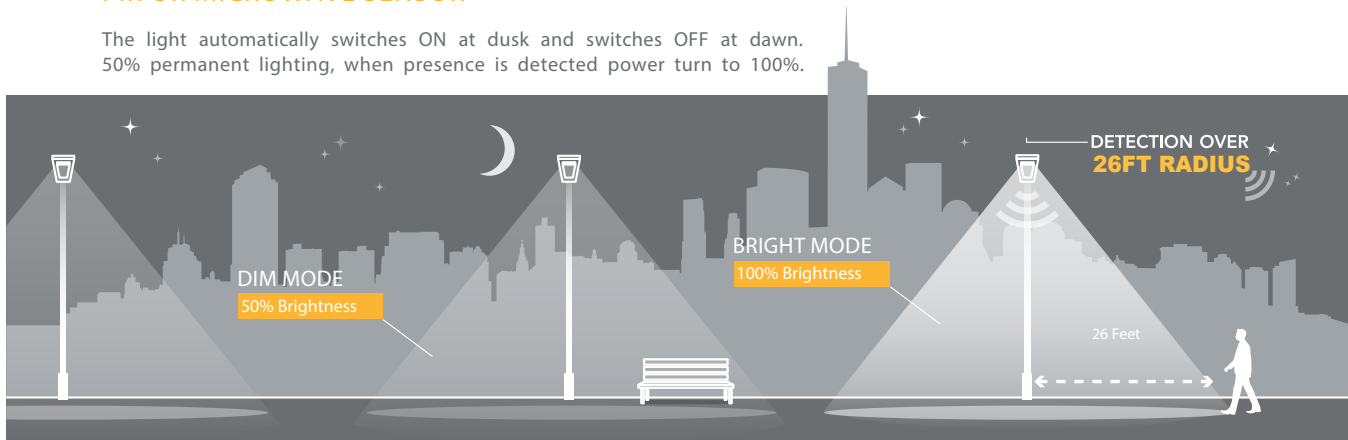


Solar All in One PRO Street Light

Motion Sensor

PIR OR MICROWAVE SENSOR

The light automatically switches ON at dusk and switches OFF at dawn. 50% permanent lighting, when presence is detected power turn to 100%.



ANTI BLACK OUT

Optimal component calibration and intelligent management system



UNEQUALED LIFETIME

Selection of the latest and highest component technology

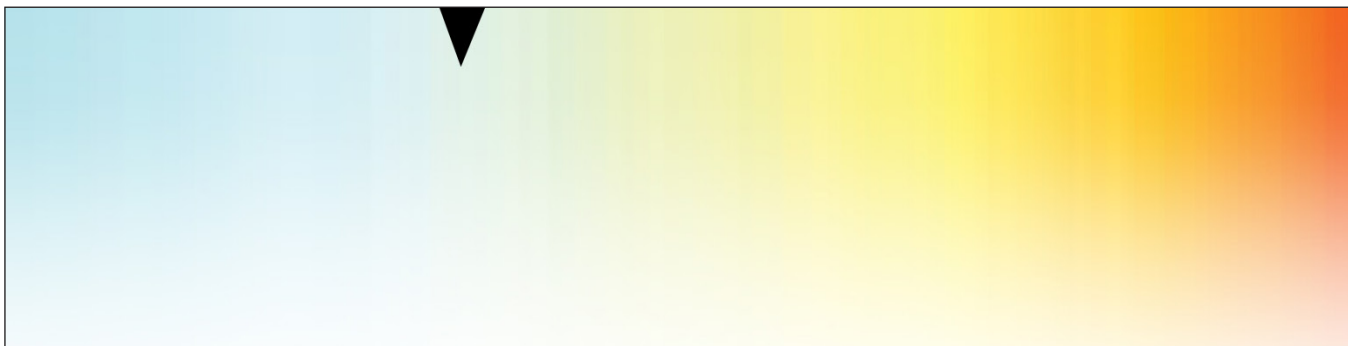


EXTREME TEMPERATURE

Resistant -4°F to 149°F

Correlated Color Temperature

5000K



Cool White

Neutral White

Warm White



Solar All in One PRO Street Light

Lithium LifePO4 Battery

The Solar All in One PRO Street Light is equipped with Iron Phosphate Lithium LiFePo4 battery. This technology has proved to be **the best chemical technology** for solar application on the market.

With a cycle life of **over 4000 Cycles @ 80% DOD**, the battery enjoys **over 10 years lifetime**.

EASY MAINTENANCE & ANTI THEFT SCREWS



Easy and direct access to the battery casing for maintenance. The fixation are made with **anti theft screws**, which request special tooling to unscrew.

ELECTRONIC PROTECTION BATTERY MANAGEMENT SYSTEM (BMS)



The electronic algorithm **protects the battery** from operating outside its safe area. Monitoring its state, calculating secondary data, reporting that data, controlling its environment, authenticating it and / or balancing it.

The BMS offers **MULTI PROTECTION** :

- OVER/UNDER LOAD
- OVER/UNDER CURRENT
- OVER/UNDER VOLTAGE
- OVER CHARGE & DISCHARGE
- TEMPERATURE MANAGEMENT

* EXTREME TEMPERATURE DOWN TO 14°F.

Standard Lithium LiFePo4 batteries have a working temperature range from 14°F to 158°F.

5 YEARS WARRANTY

With Full battery Replacement.



OVER 10 YEARS
LIFE SPAN



ALUMINUM WATERPROOF CASING & NATURAL AIRFLOW

High temperatures greatly affect the battery's lifetime. This is why our batteries are encapsulated in an aluminum waterproof casing for a **perfect heat dissipation**.

In addition to that, the casing enjoy a natural airflow which keeps the battery to ambient temperature.



Solar All in One PRO Street Light

Smart MPPT Controller

The Solar All in One PRO Street Light is equipped with a High Quality MPPT Controller, using **top technology semiconductors**.

FEATURES

HIGH TRANSFER EFFICIENCY

Charging efficiency up to 98%

MINIMAL STAND-BY POWER CONSUMPTION

Current consumption $\leq 10\text{mA}$

INTELLIGENT BATTERY MANAGEMENT **3 Phases charging** :

MPPT Charge / Constant Voltage / Floating Voltage.

INTELLIGENT LED DRIVER

Auto detecting of Dusk and Dawn for automatic operation, 7 Lighting Programs Configuration.



ANTI BLACK OUT

ANTI BLACK OUT : Load adjust according to battery capacity assuring all night long lighting in any weather conditions.

BATTERY & SYSTEM PROTECTION :

- OVER / UNDER LOAD
- OVER / UNDER CURRENT
- OVER / UNDER VOLTAGE
- OVER CHARGE & DISCHARGE
- TEMPERATURE MANAGEMENT



REMOTE CONTROL **MONITORING**

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



Solar All in One PRO Street Light

AVS-PRO-20W

LED POWER	20 WATTS
LUMINOUS FLUX	3 000 LUMENS
LIGHTING	
Efficiency	150 LUMENS / WATTS
Chips	PHILIPS LUXEON
LED Lifetime	OVER 50000 HOURS LM80
Lighting Angle	99,2 DEGREE
Light Height	9.8 FT TO 13.1 FT
STORAGE	
Technology	LITHIUM IRON PHOSPHATE LIFEPO4 - 26650
Capacity	18 AH 12.8 VOLTS
Autonomy	OVER 24 HOURS AT FULL CHARGE - 4 RAINY DAYS BACK UP
Charging time	6-7 HOURS
Lifespan	OVER 4000 CYCLES @ 80% DOD OVER 10 YEARS LIFETIME
Working Temp.	14°F TO 158°F
ENERGY	
Solar panel	60 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 (REMOTE MONITORING OPTIONAL)
Sensor	MICROWAVE 360 DEGREE MOTION SENSOR
Cabling	WATERPROOF CONNECTOR, PLUG AND PLAY
Protection	OVER LOAD/CURRENT/TEMP°/VOLTAGE/CHARGE/DISCHARGE
Certificates	EN 55015 ; EN 61000
MECHANICAL	
EPA (m2/ ft2)	0,280 / 3,01
Wind Load Rate	111.847 MPH
Pole Mounting Ø	3.50394 IN



Solar All in One PRO Street Light

AVS-PRO-40W

LED POWER	40 WATTS
LUMINOUS FLUX	6 000 LUMENS
LIGHTING	
Efficiency	150 LUMENS / WATTS
Chips	PHILIPS LUXEON
LED Lifetime	OVER 50000 HOURS LM80
Lighting Angle	99,2 DEGREE
Light Height	13.1 FT TO 16.4 FT
STORAGE	
Technology	LITHIUM IRON PHOSPHATE LIFEPO4 - 26650
Capacity	24 AH 12.8 VOLTS
Autonomy	OVER 24 HOURS AT FULL CHARGE - 4 RAINY DAYS BACK UP
Charging time	6-7 HOURS
Lifespan	OVER 4000 CYCLES @ 80% DOD OVER 10 YEARS LIFETIME
Working Temp.	14°F TO 158°F
ENERGY	
Solar panel	72 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 (REMOTE MONITORING OPTIONAL)
Sensor	MICROWAVE 360 DEGREE MOTION SENSOR
Cabling	WATERPROOF CONNECTOR, PLUG AND PLAY
Protection	OVER LOAD/CURRENT/TEMP°/VOLTAGE/CHARGE/DISCHARGE
Certificates	EN 55015 ; EN 61000
MECHANICAL	
EPA (m2/ ft2)	0,330 / 3,55
Wind Load Rate	111.847 MPH
Pole Mounting Ø	3.50394 IN



Solar All in One PRO Street Light

AVS-PRO-60W

LED POWER	60 WATTS
LUMINOUS FLUX	9 000 LUMENS
LIGHTING	
Efficiency	150 LUMENS / WATTS
Chips	PHILIPS LUXEON
LED Lifetime	OVER 50000 HOURS LM80
Lighting Angle	99,2 DEGREE
Light Height	19.7 FT TO 26.2 FT
STORAGE	
Technology	LITHIUM IRON PHOSPHATE LIFEPO4 - 26650
Capacity	42 AH 12.8 VOLTS
Autonomy	OVER 24 HOURS AT FULL CHARGE - 4 RAINY DAYS BACK UP
Charging time	6-7 HOURS
Lifespan	OVER 4000 CYCLES @ 80% DOD OVER 10 YEARS LIFETIME
Working Temp.	14°F TO 158°F
ENERGY	
Solar panel	105 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 (REMOTE MONITORING OPTIONAL)
Sensor	MICROWAVE 360 DEGREE MOTION SENSOR
Cabling	WATERPROOF CONNECTOR, PLUG AND PLAY
Protection	OVER LOAD/CURRENT/TEMP°/VOLTAGE/CHARGE/DISCHARGE
Certificates	EN 55015 ; EN 61000
MECHANICAL	
EPA (m2/ ft2)	0,350 / 3,77
Wind Load Rate	111.847 MPH
Pole Mounting Ø	3.50394 IN



Solar All in One PRO Street Light

AVS-PRO-80W

LED POWER	80 WATTS
LUMINOUS FLUX	12 000 LUMENS
LIGHTING	
Efficiency	150 LUMENS / WATTS
Chips	PHILIPS LUXEON
LED Lifetime	OVER 50000 HOURS LM80
Lighting Angle	99,2 DEGREE
Light Height	19.7 FT TO 26.2 FT
STORAGE	
Technology	LITHIUM IRON PHOSPHATE LIFEPO4 - 26650
Capacity	52 AH 12.8 VOLTS
Autonomy	OVER 24 HOURS AT FULL CHARGE - 4 RAINY DAYS BACK UP
Charging time	6-7 HOURS
Lifespan	OVER 4000 CYCLES @ 80% DOD OVER 10 YEARS LIFETIME
Working Temp.	14°F TO 158°F
ENERGY	
Solar panel	105 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 (REMOTE MONITORING OPTIONAL)
Sensor	MICROWAVE 360 DEGREE MOTION SENSOR
Cabling	WATERPROOF CONNECTOR, PLUG AND PLAY
Protection	OVER LOAD/CURRENT/TEMP°/VOLTAGE/CHARGE/DISCHARGE
Certificates	EN 55015 ; EN 61000
MECHANICAL	
EPA (m2/ ft2)	0,350 / 3,77
Wind Load Rate	111.847 MPH
Pole Mounting Ø	3.50394 IN



Solar All in One PRO Street Light

AVS-PRO-100W

LED POWER	100 WATTS
LUMINOUS FLUX	15 000 LUMENS
LIGHTING	
Efficiency	150 LUMENS / WATTS
Chips	PHILIPS LUXEON
LED Lifetime	OVER 50000 HOURS LM80
Lighting Angle	116 DEGREE
Light Height	19.7 FT TO 26.2 FT
STORAGE	
Technology	LITHIUM IRON PHOSPHATE LIFEPO4 - 26650
Capacity	62 AH 12.8 VOLTS
Autonomy	OVER 24 HOURS AT FULL CHARGE - 4 RAINY DAYS BACK UP
Charging time	6-7 HOURS
Lifespan	OVER 4000 CYCLES @ 80% DOD OVER 10 YEARS LIFETIME
Working Temp.	14°F TO 158°F
ENERGY	
Solar panel	140 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 (REMOTE MONITORING OPTIONAL)
Sensor	MICROWAVE 360 DEGREE MOTION SENSOR
Cabling	WATERPROOF CONNECTOR, PLUG AND PLAY
Protection	OVER LOAD/CURRENT/TEMP°/VOLTAGE/CHARGE/DISCHARGE
Certificates	EN 55015 ; EN 61000
MECHANICAL	
EPA (m2/ ft2)	0,360 / 3,88
Wind Load Rate	111.847 MPH
Pole Mounting Ø	3.50394 IN



Solar All in One PRO Street Light

AVS-PRO-120W


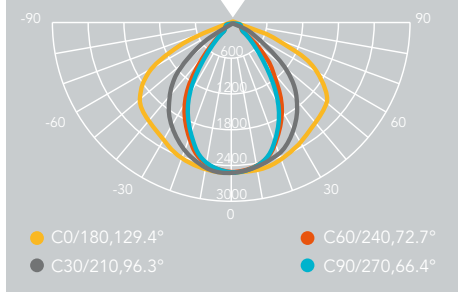
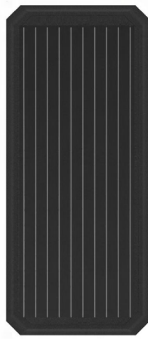

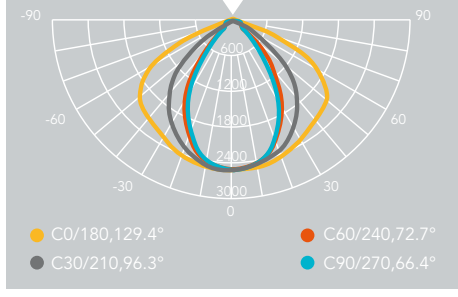


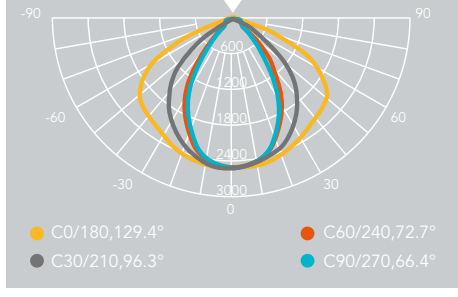

LED POWER	120 WATTS
LUMINOUS FLUX	18 000 LUMENS
LIGHTING	
Efficiency	150 LUMENS / WATTS
Chips	PHILIPS LUXEON
LED Lifetime	OVER 50000 HOURS LM80
Lighting Angle	116 DEGREE
Light Height	19.7 FT TO 26.2 FT
STORAGE	
Technology	LITHIUM IRON PHOSPHATE LIFEPO4 - 26650
Capacity	72 AH 12.8 VOLTS
Autonomy	OVER 24 HOURS AT FULL CHARGE - 4 RAINY DAYS BACK UP
Charging time	6-7 HOURS
Lifespan	OVER 4000 CYCLES @ 80% DOD OVER 10 YEARS LIFETIME
Working Temp.	14°F TO 158°F
ENERGY	
Solar panel	140 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 (REMOTE MONITORING OPTIONAL)
Sensor	MICROWAVE 360 DEGREE MOTION SENSOR
Cabling	WATERPROOF CONNECTOR, PLUG AND PLAY
Protection	OVER LOAD/CURRENT/TEMP°/VOLTAGE/CHARGE/DISCHARGE
Certificates	EN 55015 ; EN 61000
MECHANICAL	
EPA (m2/ ft2)	0,360 / 3,88
Wind Load Rate	111.847 MPH
Pole Mounting Ø	3.50394 IN



Solar All in One PRO Street Light

Light Distribution

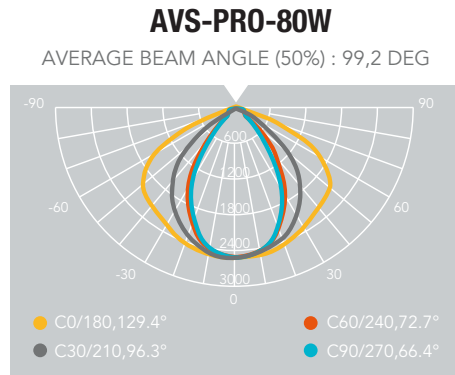
SOLAR AREA LIGHTS

 <p>IP₆₆</p> <p>LED LIGHTING PHILIPS LUXEON</p>	<p>AVS-PRO-20W</p> <p>AVERAGE BEAM ANGLE (50%) : 99,2 DEG</p>  <p>20 WATTS - 3000 LUMENS</p> <p> ● C0/180,129.4° ● C60/240,72.7° ● C30/210,96.3° ● C90/270,66.4° </p>	<p>SOLAR PANEL 60 WATTS</p>  <p>GRADE A Solar cells</p>
<p>▶ LIGHT SOURCE 3030 LED QTY (PCS) 40 LENS (PCS) 1 CRI > 70</p>		
 <p>IP₆₆</p> <p>LED LIGHTING PHILIPS LUXEON</p>	<p>AVS-PRO-40W</p> <p>AVERAGE BEAM ANGLE (50%) : 99,2 DEG</p>  <p>40 WATTS - 6000 LUMENS</p> <p> ● C0/180,129.4° ● C60/240,72.7° ● C30/210,96.3° ● C90/270,66.4° </p>	<p>SOLAR PANEL 72 WATTS</p>  <p>GRADE A Solar cells</p>
<p>▶ LIGHT SOURCE 3030 LED QTY (PCS) 40 LENS (PCS) 2 CRI > 70</p>		
 <p>IP₆₆</p> <p>LED LIGHTING PHILIPS LUXEON</p>	<p>AVS-PRO-60W</p> <p>AVERAGE BEAM ANGLE (50%) : 99,2 DEG</p>  <p>60 WATTS - 9000 LUMENS</p> <p> ● C0/180,129.4° ● C60/240,72.7° ● C30/210,96.3° ● C90/270,66.4° </p>	<p>SOLAR PANEL 105 WATTS</p>  <p>GRADE A Solar cells</p>
<p>▶ LIGHT SOURCE 3030 LED QTY (PCS) 40 LENS (PCS) 3 CRI > 70</p>		



Solar All in One PRO Street Light

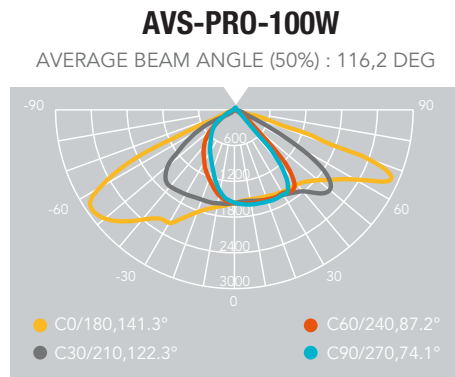
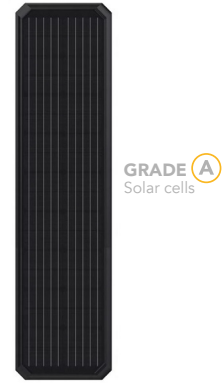
Light Distribution



80 WATTS - 12000 LUMENS

► LIGHT SOURCE 3030 | LED QTY (PCS) 40 | LENS (PCS) 3 | CRI > 70

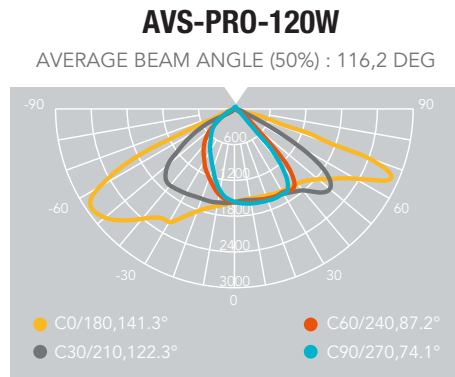
SOLAR PANEL 105 WATTS



100 WATTS - 15000 LUMEN

► LIGHT SOURCE 3030 | LED QTY (PCS) 40 | LENS (PCS) 1 | CRI > 70

SOLAR PANEL 140 WATTS



120 WATTS - 18000 LUMEN

► LIGHT SOURCE 3030 | LED QTY (PCS) 40 | LENS (PCS) 1 | CRI > 70

SOLAR PANEL 140 WATTS

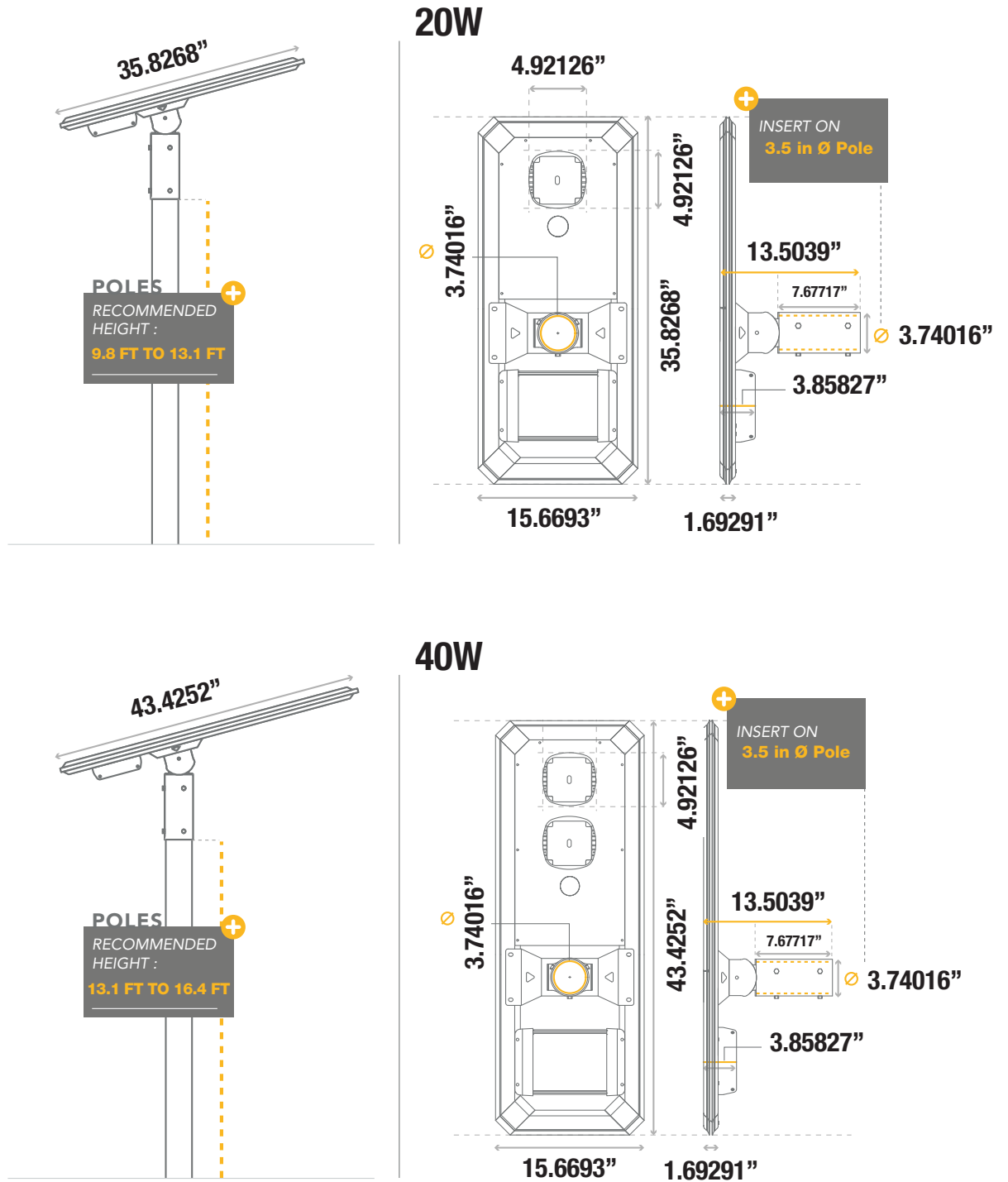


SOLAR AREA LIGHTS



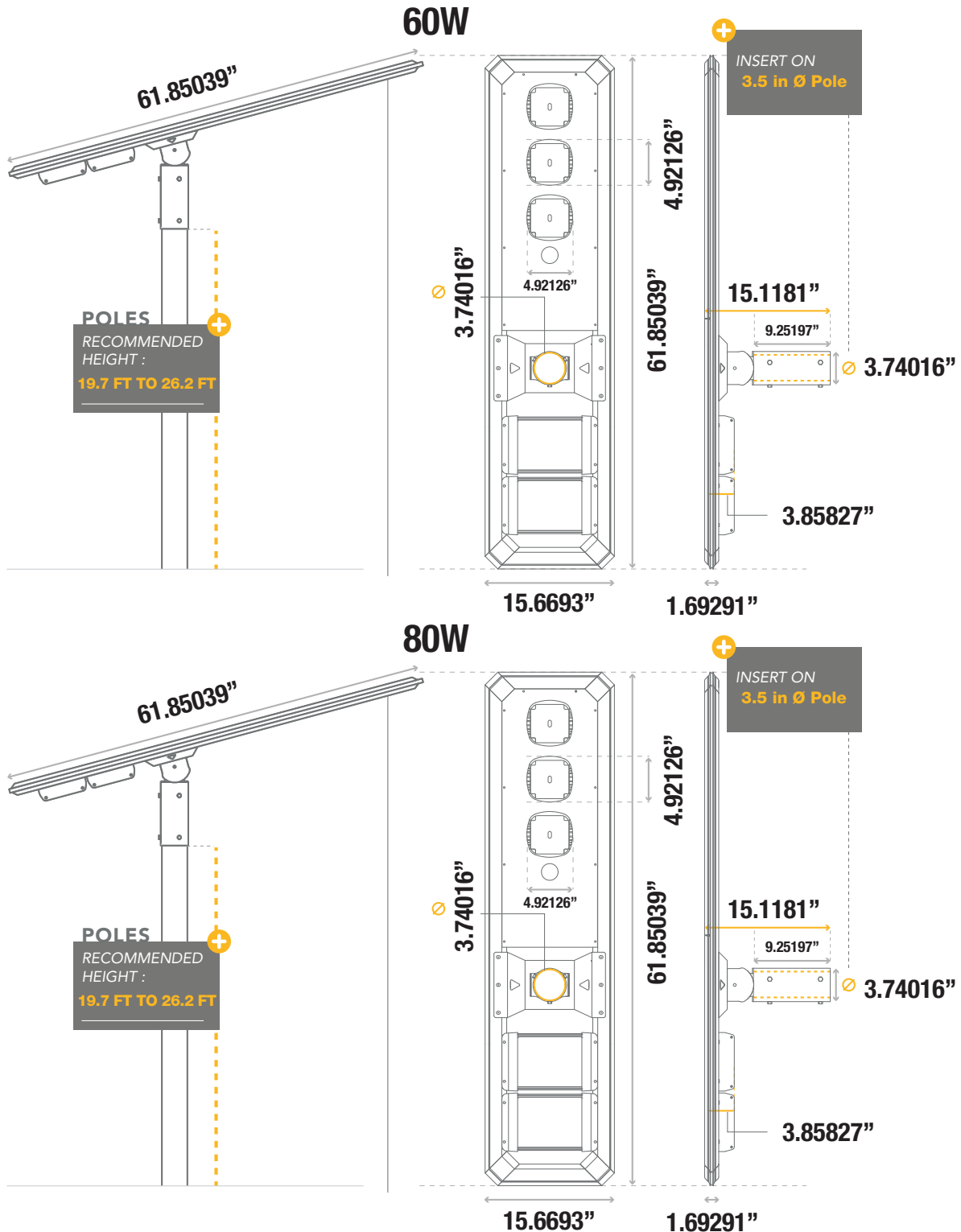
Solar All in One PRO Street Light

Dimensions



Solar All in One PRO Street Light

Dimensions

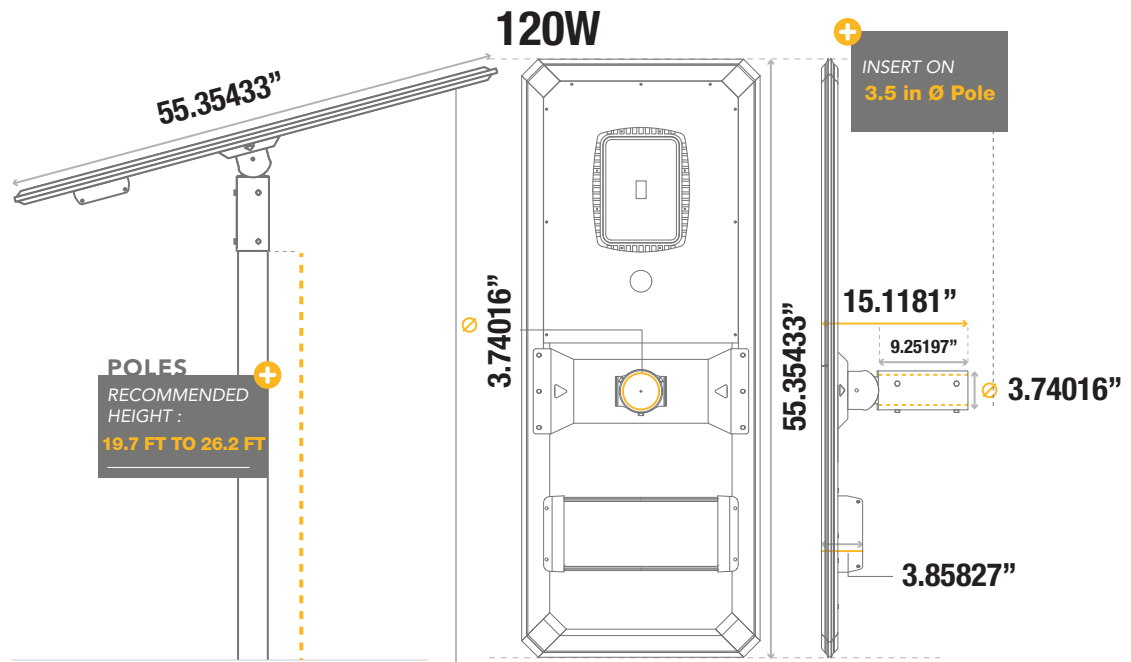
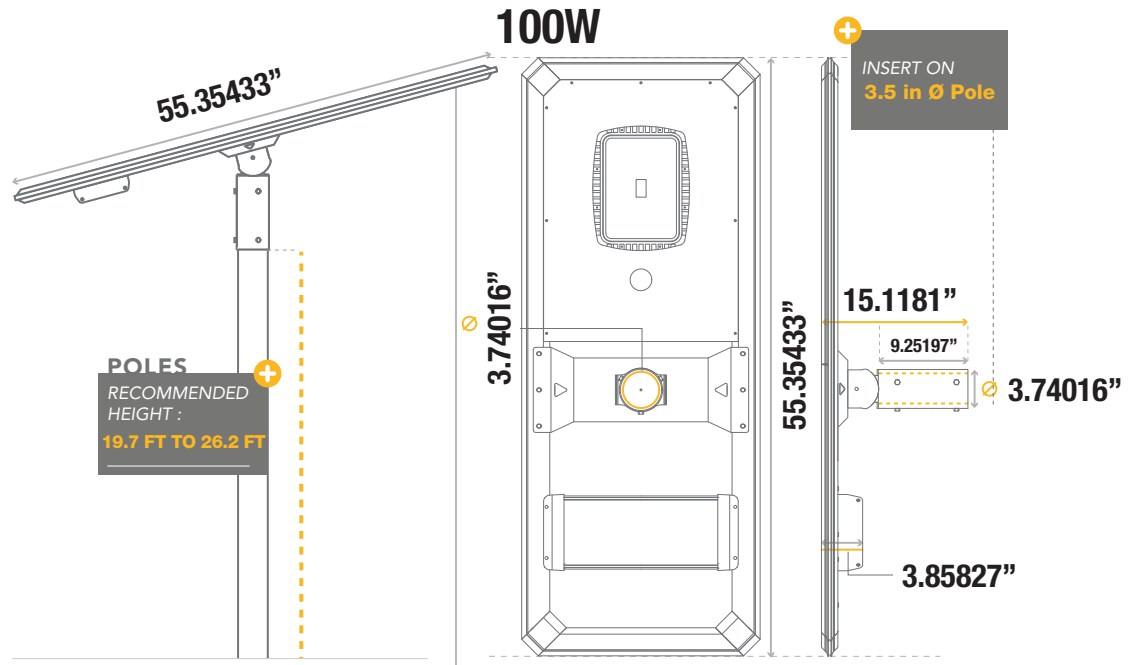


SOLAR AREA LIGHTS



Solar All in One PRO Street Light

Dimensions



Solar All in One PRO Street Light

Installation

The installation can be adjusted according to different environments or illumination needs.



EASY INSTALLATION
JUST INSERT ON THE
TOP OF A POLE



Solar All in One PRO Street Light

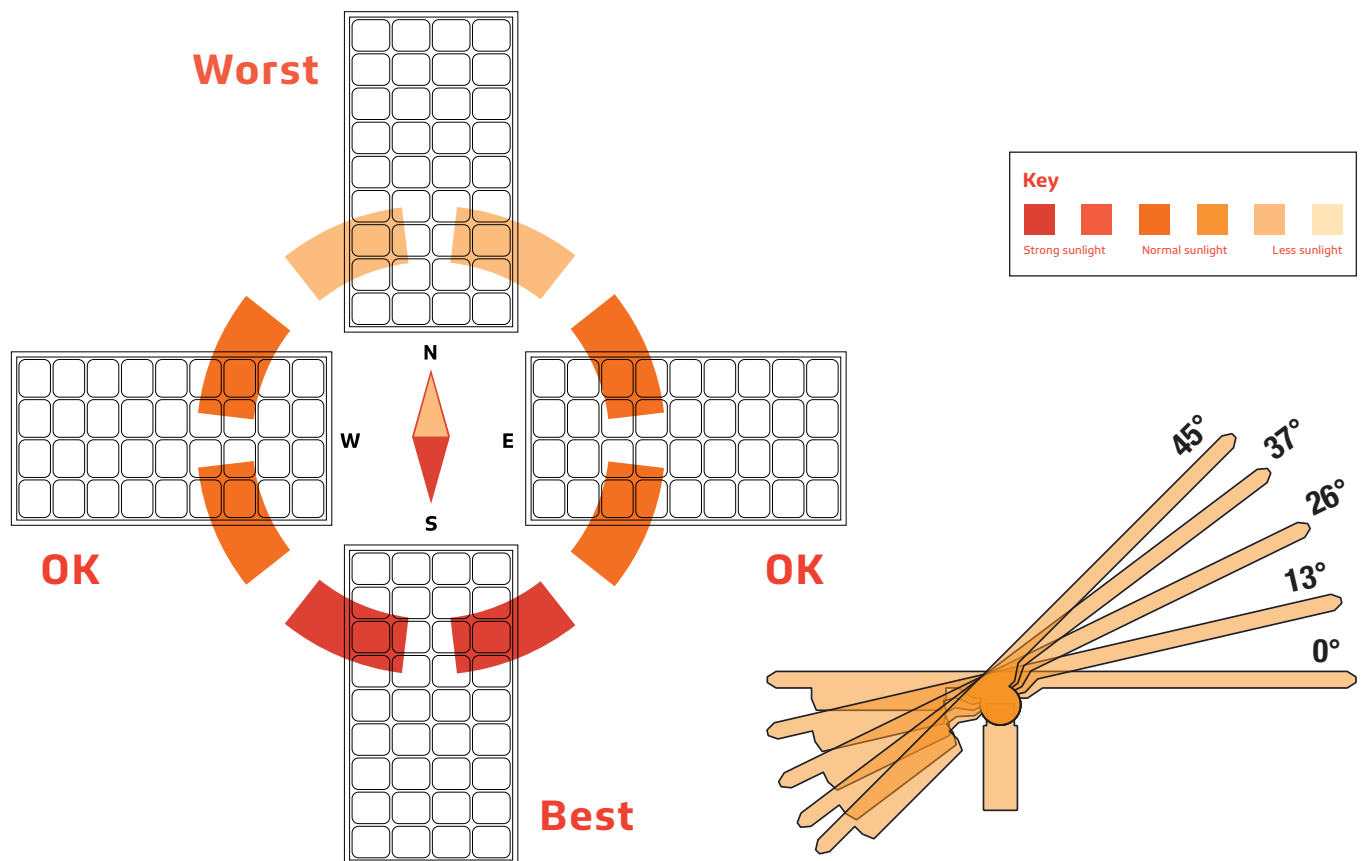
Optimum Panel Orientation

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 battery.

Best Facing Direction of Solar Panel

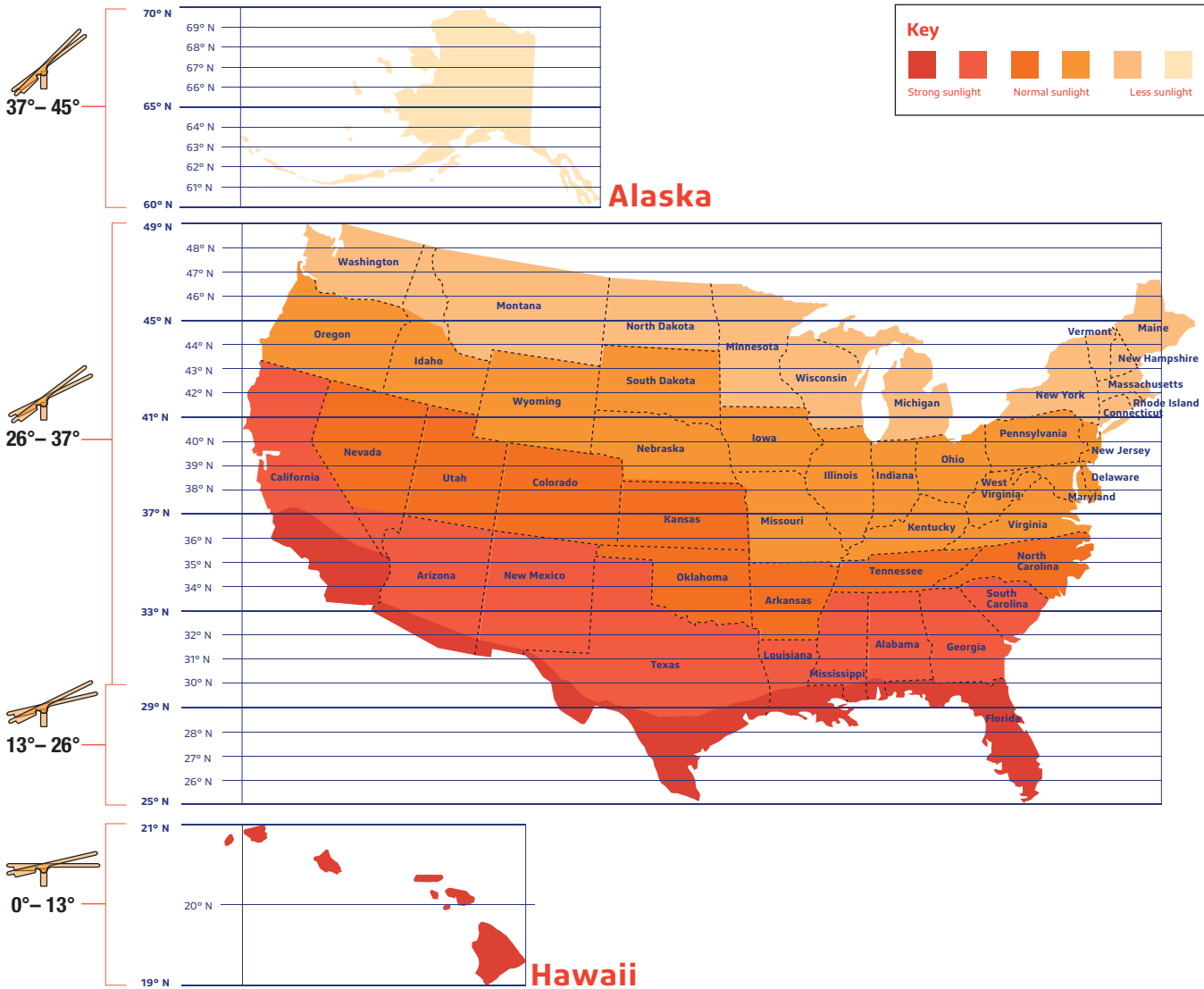


The area will dictate the installation of the fixtures and will sometimes prevent the lights from facing south. Panels facing West & East won't get as much light as Southern facing panels, but will still collect a good amount of sunlight. A North facing panel also works, but it will take longer to charge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

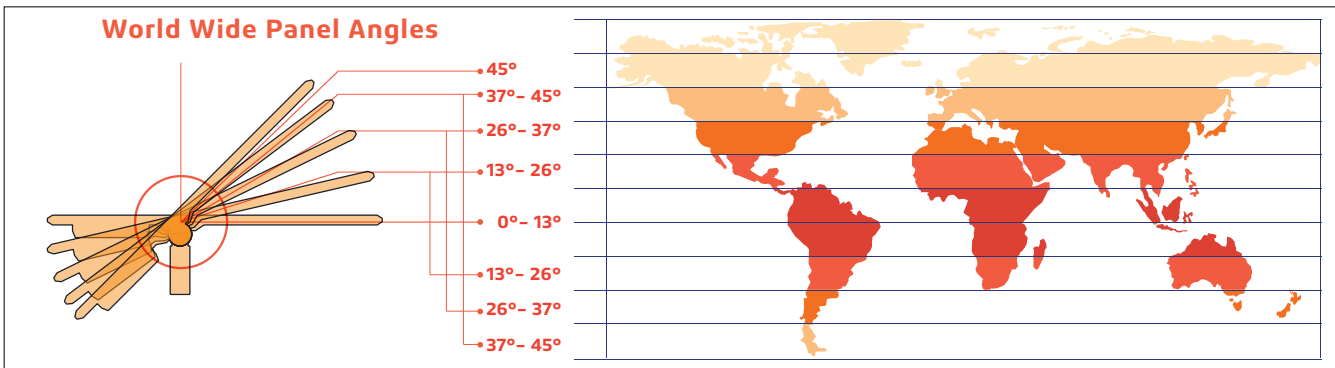


Solar All in One PRO Street Light

Optimum Panel Orientation



SOLAR AREA LIGHTS



Solar All in One PRO Street Light

Packaging

AVS-PRO-20W



Unit size L x W x H	35.8268 X 15.6693 X 6.49606 IN
Carton size	37.9921 X 17.9134 X 9.44882 IN
Net weight	27.55778 LB
Gross weight	31.5261 LB
QTY per container 20" / 40" / 40"HQ	240 / 505 / 577

AVS-PRO-40W



Unit size L x W x H	43.70079 X 15.748 X 6.49606 IN
Carton size	45.86614 X 17.9134 X 9.44882 IN
Net weight	34.83304 LB
Gross weight	40.78552 LB
QTY per container 20" / 40" / 40"HQ	240 / 505 / 577

AVS-PRO-60W



Unit size L x W x H	61.81102 X 15.748 X 6.49606 IN
Carton size	63.97638 X 17.9134 X 9.44882 IN
Net weight	42.32875 LB
Gross weight	51.80863 LB
QTY per container 20" / 40" / 40"HQ	150 / 323 / 358

AVS-PRO-80W



Unit size L x W x H	61.81102 X 15.748 X 6.49606 IN
Carton size	63.97638 X 17.9134 X 9.44882 IN
Net weight	44.423146 LB
Gross weight	54.23372 LB
QTY per container 20" / 40" / 40"HQ	150 / 323 / 358

AVS-PRO-100W



Unit size L x W x H	55.43307 X 22.2441 X 5.90551 IN
Carton size	57.48031 X 24.0157 X 10.2362 IN
Net weight	48.832391 LB
Gross weight	60.296429 LB
QTY per container 20" / 40" / 40"HQ	122 / 267 / 291

AVS-PRO-120W

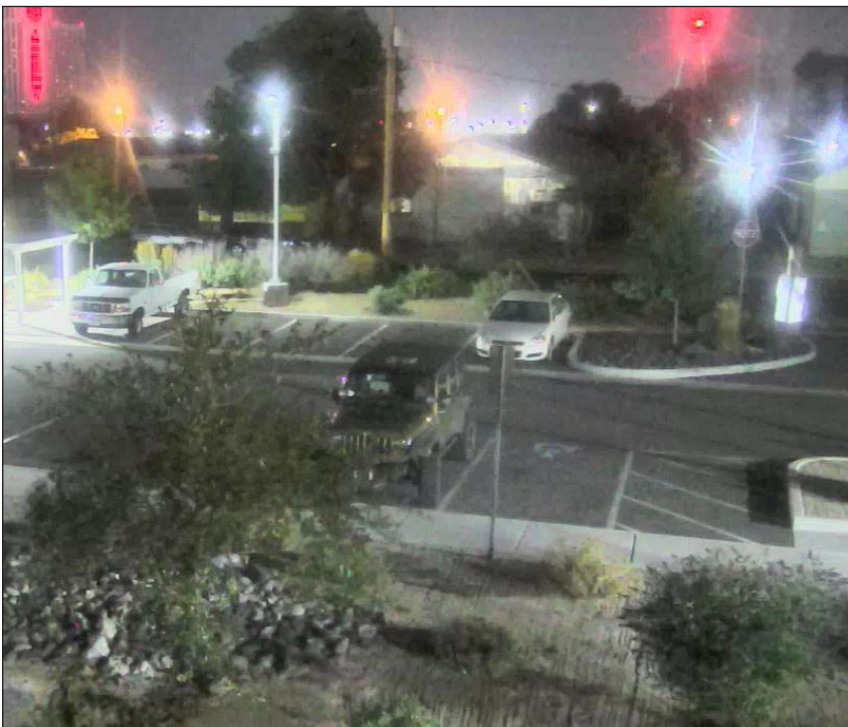
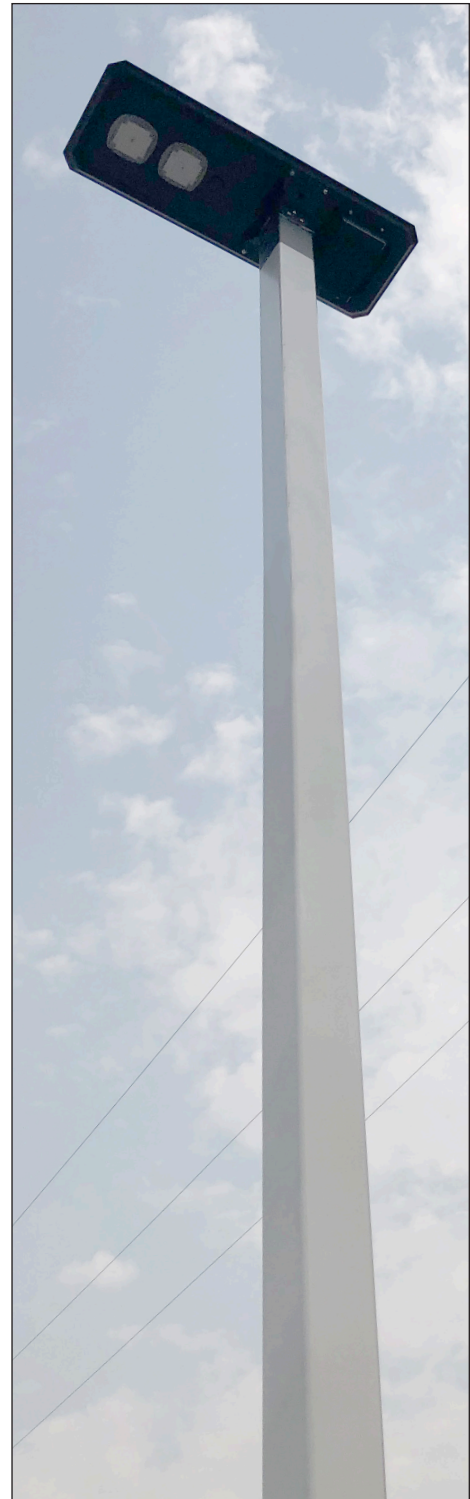


Unit size L x W x H	55.43307 X 22.2441 X 5.90551 IN
Carton size	57.48031 X 24.0157 X 10.2362 IN
Net weight	51.037014 LB
Gross weight	64.705674 LB
QTY per container 20" / 40" / 40"HQ	122 / 267 / 291



Solar All in One PRO Street Light

Application



SOLAR AREA LIGHTS

