





### Solar for Lighting

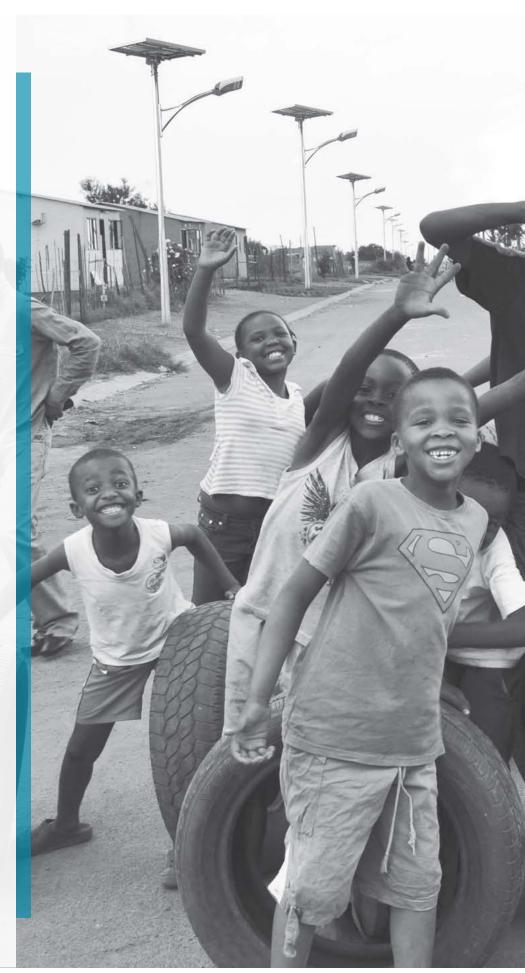
Truelite solar is an industry leading company in solar lighting solutions. Headquartered in the USA, Truelite operates in 18 countries with a unique catalogue of solar lighting products. The products are unique in design, development and applications, with advanced technology back up for easy use and maintenance free deployment in most challenging applications. The lights are manufactured in the state of the art manufacturing facilities, tested and certified for high quality standards.

We have patented products in solar area and roadway lighting series with integrated lithium battery banks and controllers make the light the perfect solution for commercial, humanitarian and reconstruction projects.

Truelite's advantage against the traditional solar lighting benefit the customers with huge cost savings in the areas of procurement, logistics, installation and maintenance.

Truelite has vast experience in supporting projects across the world, and works with many organizations for their solar lighting requirements.

Our vision is to excel and to be the leading solar lighting company globally by developing advanced solar lighting solutions for our customers that exceeds their quality expectations.





# 4GSmart of truelite

SOLAR STREET LIGHT 15 | 20 | 30 Watts

Truelite 4G Smart Solar LED street light is the 4th generation integrated solar light, with increased efficiency and more advanced technology. The light comes with an inbuilt lithium battery bank and MPPT charge controller. The light has a

better output with longer battery backup than the normal all in one solar lights. The 4G series has variance from 15 watts up to 30 watts with 100% brightness for 12 hour operation without dimming.

4G smart solar lights are optimised and recommended for applications up to 6 meter pole height, perfect for lighting in small roadways, pathways and area lighting applications.

Key Features



# **Light Output**

- Up to 4500 lumens light output.
- 15 watts, 20 watts and 30 watts variance.
- High efficacy of 160 lumen per watt.
- Lumiled power source with LM-80 - 50,000 hours.
- IP67 aluminium die-cast casing and certified IK08.
- Vandal proof built.

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# **Lithium Battery Bank**

- Integrated lithium battery bank with more than 6000 cycles
- 12 hours 100 % brightness working with automatic dusk to dawn operation.
- Maximum capacity of 635 Wh.



### Smart MPPT Solar Controller

- Customized working mode for dimming and working hours.
- Advanced metering and remote control options.
- Easy setting up functions in remote control - optional.

### **Solar Panel**

- High efficiency design; 20% efficiency.
- External solar panel make the system flexible for any geographical conditions for the scalability of the panels to meet low irradiance project sites.









**IP67** 







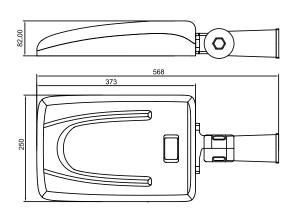








Model No.	TLAI-15W	TLAI-20W	TLAI-30W
Fixture IP	IP67		
Material	Aluminium Die Casting		
LED Type	Philips Lumileds		
CCT Range	3000K / 4000K / 5000K / 6000K		
Beam Angle	140° *70 °		
CRI	>80		
Luminous Flux	2250lm	3000lm	4500lm
Rated Power	15W	20W	30W
Standard Battery Capacity(24h)	360WH	480WH	635WH
Max. Extended Battery Capacity	635Wh		
Charge Time	5 Hours		
Discharge Time	>24 Hours		
Control System	Programmable MPPT Controller	/ Hybrid Controller / Wireless Intellige	ent Control
Solar Panel	60W 18V	80W 18V	120W 18V
Cell Type	MONO Crystalline		
Working Temp.	-20 °C ~ 65 °C		
Control Method	Manual ON/OFF / Automatic ON/OFF / Time Control		
Lighting Modes	100% Continuous lighting / Energy saving / Customized modes.		
N.W/Light	7.2Kg	7.3Kg	7.5Kg
G.W/Light	8Kg	8.2Kg	8.8Kg
Product Size	568*82*250mm		
CTN Size	620*135*300mm		
Certificates	CE, ROHS, FCC, IP67, IK08, RCM, LM80		





### INTEGRATED **SOLAR LIGHTING**

# 4G by truelite

### **Smart Solar Street Light**

40 | 50 | 60 Watts

Truelite 4G Smart Solar LED street light is the 4th generation all in one series, with increased efficiency and more advanced technology. The light comes with an inbuilt lithium bank and MPPT battery charge controller. The light has a better

output with longer battery backup than the normal all in one solar lights. The 4G series has variance from 40 watts up to 60 watts with 100% brightness for 12 hour operation without dimming.

4G smart solar lights are optimised and recommended for applications up to 6-10 meter pole height, for perfect lighting in small roadways, pathways and area lighting applications.

Key Features



# **Light Output**

- Up to 9000 lumens light output.
- 40 watts, 50 watts and 60 watts variance.
- High efficacy of 160 lumen per watt.
- Lumiled power source with LM-80 - 50,000 hours.
- IP67 aluminium die-cast casing and certified IK08.
- Vandal proof build.

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# **Lithium Battery Bank**

- Integrated lithium battery bank with more than 6000 cycles
- 12 hours 100 % brightness working with automatic dusk to dawn operation.
- Maximum capacity of 1200 Wh.



# **Smart MPPT Solar** Controller

- Customized working mode for dimming and working hours.
- Advanced metering and remote control options.
- Easy setting up functions in remote control - optional.

### **Solar Panel**

- High efficiency design; 20% efficiency.
- External solar panel make the system flexible for any geographical conditions for the scalability of the panels to meet low irradiance project sites.











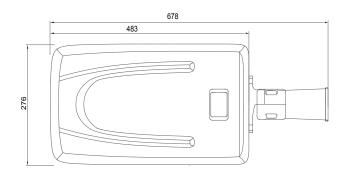








Model No.	TLAI-40W	TLAI-50W	TLAI-60W	
Fixture IP	IP67	IP67		
Material	Aluminium Die Casting			
LED Type	Philips Lumileds SMD3030 24	48 Pcs		
CCT Range	3000K / 4000K / 5000K / 6000	)K		
Beam Angle	140° *70 °			
CRI	>80			
Luminous Flux	6000lm	7500lm	9000lm	
Rated Power	40W	50W	60W	
Standard Battery Capacity(24h)	768WH	768WH	768WH	
Max. Extended Battery Capacity	1200Wh	1200Wh		
Charge Time	5 Hours	5 Hours		
Discharge Time	>24 Hours with dimming			
Control System	Programmable MPPT Contro	Programmable MPPT Controller / Hybrid Controller / Wireless Intelligent Control		
Solar Panel	180W 18V	180W 18V 200W 18V 240W 18V		
Cell Type	MONO Crystalline	MONO Crystalline		
Working Temp.	-20 °C ~ 65 °C	-20 °C ~ 65 °C		
Control Method	Manual ON/OFF / Automatic ON/OFF / Time Control			
Lighting Modes	100% Continuous lighting / E	100% Continuous lighting / Energy saving / Customized modes.		
N.W/Light	9.1Kg	9.1Kg	9.1Kg	
G.W/Light	10Kg	10Kg	10Kg	
Product Size	678*102*276mm	678*102*276mm		
Certificates	CE, ROHS, FCC, IP67, IK08, LM80			







SOLAR STREET LIGHT 40 | 60 | 80 | 90 | 100 | 110 Watts

Truelite's Thor smart solar LED street light is the most advanced form of solar roadway lighting available, that integrates a lithium battery and smart controller into the light head that can provide up to 17000 lumens and 24 hours of battery backup in a completely automated operation.

Thor by Truelite was developed after the huge success of our 4G smart light on the same principle and technology for higher lighting requirements. The light has a better output with more longer battery backup than regular all-in-one solar lights.

# Key Features True revolution in solar roadway lighting

### **Light Head**

- Up to 17000 lumens light output.
- 40 watts to 110 watts variance.
- High efficacy of 160 lumen per
- Lumileds power source certified LM-80 standard - 50,000 hours.
- IP 66 aluminium die-cast casing and certified IK08 standard.
- Vandal-resistant built.
- Smart communication integration.
- Suitable for high mast applications up to 14m pole height.

# **Battery Bank**

- Integrated lithium battery bank with more than 6000 cycles.
- 12 hours 100 % brightness working with automatic dusk to dawn operation.
- Maximum capacity of 2160 Wh.



### **Smart MPPT Solar** Controller

- User defined working modes for dimming and working hours.
- Advanced metering and communication options.
- Easy setup functions in remote control - optional

### **Solar Panel**

- Thor by Truelite is equipped to connect 72 cell solar panels up to 400 watts.
- High efficiency design; 20% efficiency.
- External solar panel make the system flexible for any geographical conditions and scalability of the panel size to meet low irradiance project locations.











**IP67** 







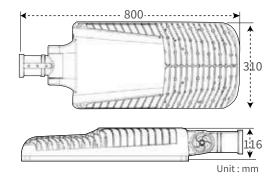






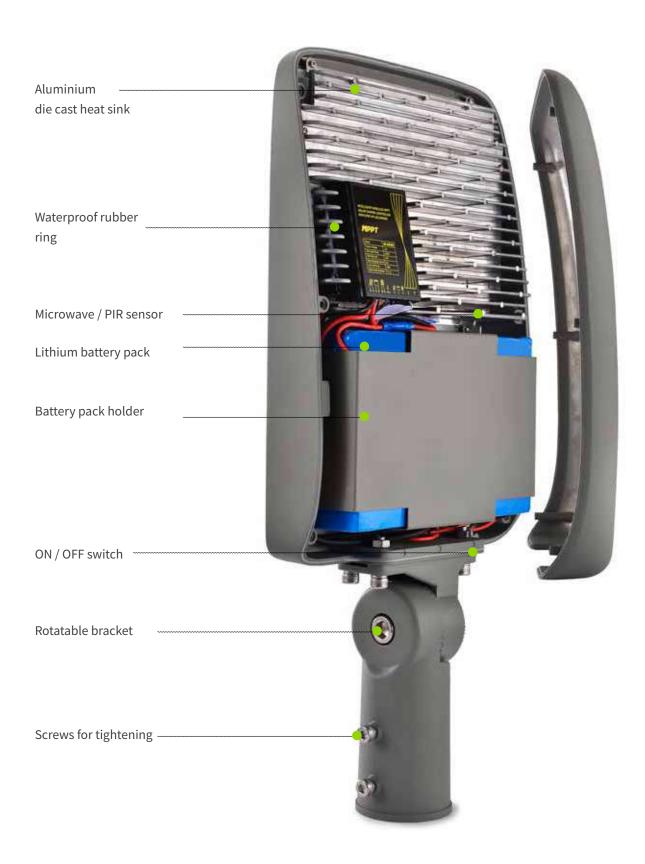


Model No.	TLT4-6000	TLT6-9000	TLT8-11200	TLT9-12600	TLT10-14000	TLT11-15400
Fixture IP	IP67			·		·
Material	Aluminium Die Casting					
LED Type	Philips Lumile	ds				
CCT Range	3000K / 4000K	7/5000K/6000K				
Beam Angle	145° * 83 °					
CRI	>81					
Luminous Flux	6400lm	9600lm	12800lm	14400lm	16000lm	17600lm
Rated Power	40W	60W	80W	90W	100W	110W
Standard Battery Capacity(24h)	1560Wh	1560Wh	2160Wh	2160Wh	2160Wh	2160Wh
Max. Extended Battery Capacity	2160Wh					
Charge Time	5 Hours					
Discharge Time	>24 Hours					
Control System	Programmable MPPT Controller / Hybrid Controller / Wireless Intelligent Control					
Solar Panel	160W 36V	240W 36V	320W 36V	320W 36V	350W 36V	350W 36V
Cell Type	MONO Crystalline					
Working Temp.	-20 °C ~ 65 °C					
Control Method	Automatic dusk to dawn / Time Control / Manual ON-OFF					
Lighting Modes	100% Continuous lighting / Energy saving / Customized modes.					
N.W/Light	15.80kg	15.80kg	20.35Kg	20.35Kg	20.35Kg	20.35Kg
G.W/Light	16.30Kg	16.30Kg	21.60Kg	21.60Kg	21.60Kg	21.60Kg
Product Size	800*310*116m	nm				
CTN Size	930*400*220mm					
Certificates	CE, ROHS, FCC	C, IP67 IK08, RCM, LN	180			

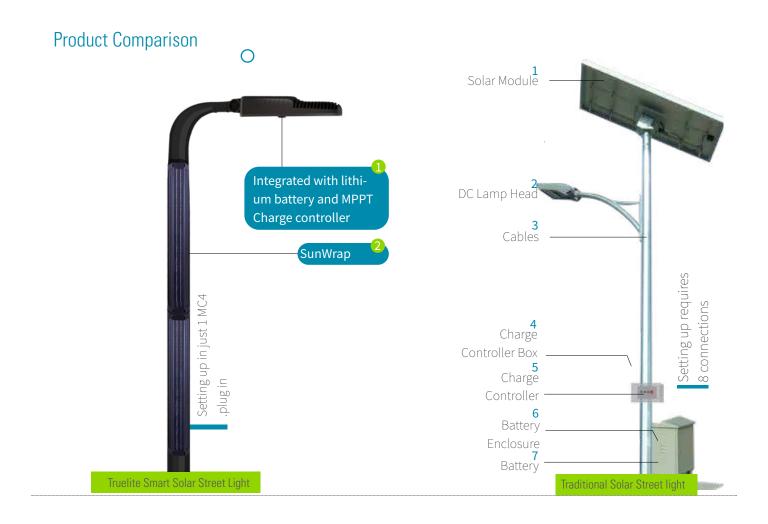




# **Product Components**







# Advantages & cost savings against traditional solar lights ▼

Procurement savings

More units for less cost. Truelite smart solar street light has just 2 components – the light head and the solar panel - against traditional solar lights with separate batteries, battery boxes, charge controller and casing, cables, connectors and accessories. Additional benefits in ordering, by avoiding the complication of multi-component purchasing and integration.



### **Faster turnaround time**

Faster production, delivery and installation.



There is no maintenance required for the lights and batteries, and no ground-based components.



#### Installation costs

installation and set-up. Truelite smart solar street light can be easily set up with just a single MC4 plug connecting the light head and the panel and huge cost savings on battery boxes, associated civil works, and the fixing of charge controllers.



# Logistics and warehousing savings

50 % savings on space requirements help lower transportation and warehousing costs.



# Unmatched 5 years warranty

Truelite will replace any unit, that is found to be defective due to manufacturing failures.



SunWrap - Pole Integrated Solar Systems from Truelite - are our most advanced and innovative solar modules for various pole mounted PV applications. Sun Wrap's patented design, manufactured to high quality standards, can meet decorative and high-end application - especially for area and garden lighting without compromising aesthetics.

SunWrap is the outcome of our constant R&D in Solar Lighting, equipped with highly efficient solar modules in a hexagonal aluminium die cast structure for maximum performance, strength and durability in many challenging applications.

SunWrap can be integrated into any pole shapes and dimensions, making the system almost universal, and the detachable and light weight design helps for easy and simple installation for a complete maintenance free life.





# **Universal application**

SunWrap can be used in any type of poles and designs. Poles can be sourced separately, while the detachable design with adjustable spacing brackets makes the mounting of the Sun Wrap easy in every instance. SunWrap can be installed even in existing poles without dismantling them making the application even more universal.

# Design aesthetics

The relatively large area of solar panels on the pole top has previously excluded solar lighting as an option for areas where design, aesthetics and decorative lighting applications are key factors. SunWrap Module Systems is the real answer which is compact and fully integrates on to the pole and available in custom colors to match the design of the pole.



# High efficient solar modul

SunWrap is equipped with highly efficient solar modules to generate the maximum power to meet various application requirements. The hexagonal structure with wide angle placement of modules increases the surface area for capturing the sun from all directions.



# Scalability of the systems

SunWrap can be scaled with multiple units to get the desired panel sizing for higher applications.



# Easy installation

No separate mounting brackets required to install the SunWrap as the brackets are integrated in to the system.



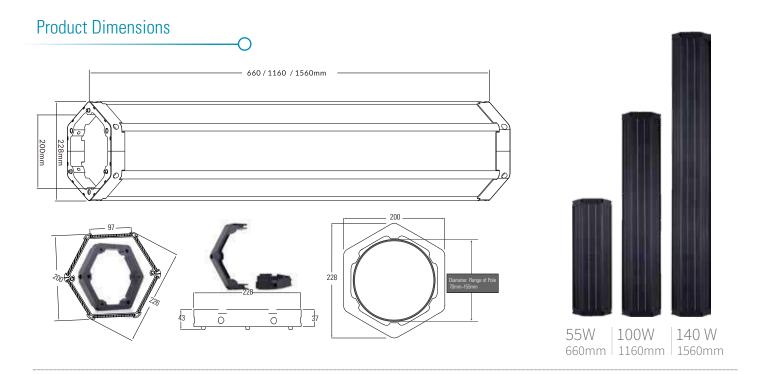
# Patented design

SunWrap Pole Integrated Module Systems are fully patented design and manufactured in high standards.





Model No.	TLSW55	TLSW100	TLSW140
Cell type	Mono Crystalline	Mono Crystalline	Mono Crystalline
Pmax	55W	100W	140W
Vmp	18V / 36V	18V / 36V	18V / 36V
Imp	3.06A	5.6A	7.8A
Carton dimensions	70 x 28 x 28 cm	120 x 28 x 28 cm	159 x 28 x 28 cm
Frame material	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy
Solar cell efficiency	>21.2%	>21.2%	>21.2%
Cable model	2.5mm² with MC4	2.5mm² with MC4	2.5mm² with MC4
Operating temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Warranty	5 years	5 years	5 years
Operational life	25 years	25 years	25 years
Net weight	9.2 kg	14.3kg	21.5kg
Gross weight	10.6kg	15.8kg	22.5kg





# Compatible solar integrated lights from Truelite

Built in lithium battery, BMS and smart controller



THOR
SMART SOLAR STREET LIGHT
40|60|80|90|100|110 Watts



SMART SOLAR STREET LIGHT 15 | 20 | 30 Watts





38cm | 60cm | 90cm



**SunScape** Solar bollard from Truelite is the answer to the professional landscape lighting projects with solar. Made of extremely durable materials and certified IK10, makes SunScape the industry leading product in solar bollard lights. The SunScape light head is made of unbreakable polycarbonate material in a curved design, prevents dust accumulation on the surface and helps 96% transmittance of light. The design maximizes the irradiance to the solar cells for better efficiency and the body is diecast aluminum built to the highest manufacturing standards

**SunScape** is designed to work all night with user defined settings for color temperature, light levels and equipped with inbuilt motion sensor and can work dusk dawn. The system is a fully integrated product with built in 6.2 watts PV, lithium LFP battery bank and smart controller, produces 400 Lumens, provides 3 days of autonomy, makes the perfect choice for projects and home use. SunScape is very easy to install, vandal proof and offered in standard colors and sizes with an option to customise for project requirements.

# Solar for Landscape Lighting



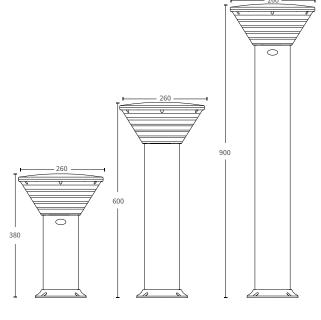






# **Product Dimensions**





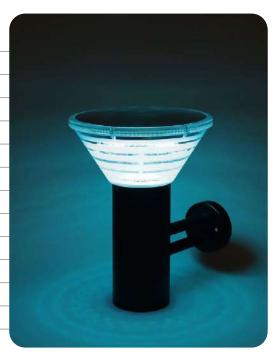
# Wall Mount Option





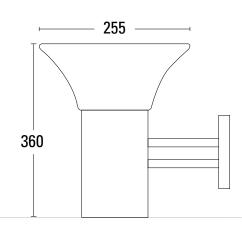
**Product Specification** 

Model Number	TL-GL255R-WALL
LED Source	1.5W
Luminous flux	>260lm
LED Color	3000K,6000K, RGB
Control method	Press button to change color
Solar Panel	6.2W 5V
Battery	3.2V 12AH
Charging time	5 hours
Discharging time	>12hours
Working Temp.	-15°C~ +70°C
Enclosure Rating	IP65 + IK10
Housing Material	Polycarbonate + aluminium
Housing Color	White / Grey / Black



# **Product Dimensions**







Scan to send enquir

Email: info@truelite.us www.truelite.us



Truelite SunHope solar shelter light is adapted from our most successful 4G LED street light built on the same platform is the answer to vast solar lighting applications in urban and rural living. Truelite solar shelter light has an inbuilt lithium battery and charge controller integrated with high power LED source

making the light a unique weather proof lighting fixture with the advantage of solar.

The easy MC4 plug in setup makes the light extremely easy for installation, and easily portable. Built with high quality components, Truelite SunHope solar shelter light can meet project

requirements in any challenging environment. Truelite solar shelter light is available from 12 watts.

The light comes in two variants, the **Home Series** for low power home use and the **Ultra Series** for high power applications.

Key Features



Truelite SunHope solar shelter light comes with standard and flexible solar panels for curved surface installations. Truelite solar shelter light also has the ability for solar scalability which enables adding panels for demanding weather conditions.



# Variable Lighting Modes

Constant power with full brightness, energy saving mode with dimming options and variable modes for changing brightness on time intervals that can be set according to user requirements via remote controller (optional).



# Lithium Battery Bank

Inbuilt lithium battery bank offers 4 days autonomy in energy saving mode and 12 hours dusk to dawn working in constant lighting mode with 100% power.



# Microwave Motion Sensor

The variable lighting mode function is designed with an advanced built-in microwave motion sensor to ensure wider angle and longer distance coverage.



# Super Brightness Using high power LED light

Using high power LED light source with an advanced design makes Truelite SunHope solar shelter light a super bright luminous efficacy fixture of 140 lumens per watt.



# **Efficient MPPT Control System**

Advanced MPPT controller offers faster charging and efficiency in adverse weather conditions ensuring the system works to the expected level.



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# **IP67 Weatherproof Fixture**

Complete ABS plastic external housing, with aluminium bars inside for efficient heat dissipation, perfectly designed for any outdoor and indoor applications.





# Product Specifications - Home Series

Model Number	TLHS360	TLHS600	
Fixture IP	IP65		
LED Type	SMD2835 384pcs SMD2835 516pcs		
CCT Range	3000K / 4000K / 6000K		
Rated Power	12W	24W	
Luminous Flux	1730lm	3450lm	
Viewing Angle	120 Degree		
Sensor Type	Microwave Sensor		
Battery	12V 216Wh Lithium	12V 288Wh Lithium	
Charge Time	6 Hours		
Discharge Time	12 Hours		
Controller Type	PWM		
Solar Panel	60W 18V	100W 18V	
Cable Length	5M	5M	
Working Temp.	-20 °C - +65 °C		
Lighting Modes	Manual ON/OFF + Automatic ON/OFF		
N.W/Unit	4 lighting modes optional by remote control		
G.W/Unit	1.8Kg	2.8Kg	
Warranty	2 years	2 years	







# **INTEGRATED SOLAR SUN BEAM FLOOD LIGHT**





**Smart Solar Flood Light** 

880lm | 1680lm | 2480lm | 3280 lms



























### **INTEGRATED SOLAR SUN BEAM FLOOD LIGHT**



# SUN BEAM by truelite

### **Smart Solar Flood Light**

880lm | 1680lm | 2480lm | 3280 lms

Truelite Smart Solar Sun Beam Flood Light Is the 5th generation all in Two series, with increased efficiency and more advanced technology. The light comes with an inbuilt lithium battery bank and Smart charge controller. The light has a better

output with longer battery backup than the normal all in one solar lights. sun beam series has variance from 4.5 watts upto 18.5 watts with 12 hour operation with dimming.

Sun Beam smart solar lights are optimised and recommended for applications upto 4 meters height, for perfect lighting in small roadways, pathways and residential area lighting applications.



# **Light Output**

- Up to 3280 lumens light output.
- 4 watts, 18.5 watts variance.
- High efficacy of 175 lumen per watt.
- Lumiled power source with LM-80 - 50,000 hours.
- IP65 aluminium die-cast casing and certified IK08.
- Vandal proof build.



- Customized working mode for dimming and working hours.
- Advanced metering and remote control options.
  - Easy setting up functions in remote control - optional.

# **Lithium Battery Bank**

- Integrated lithium battery bank with more than 2000 cycles
- 12 hours auto dimming brightness working with automatic dusk to dawn operation.
- Maximum capacity of 154 Wh.

# Solar Panel

- High efficiency design; 20% efficiency.
- External solar panel make the system flexible for any geographical conditions for the scalability of the panels to meet low irradiance project sites.



























3 Days

Detection

Waterproof

### **INTEGRATED**

# **SOLAR SUN BEAM FLOOD LIGHT**



# SUN BEAM by truelite

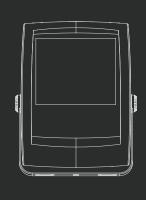
Smart Solar Flood Light 880lm | 1680lm | 2480lm | 3280 lms



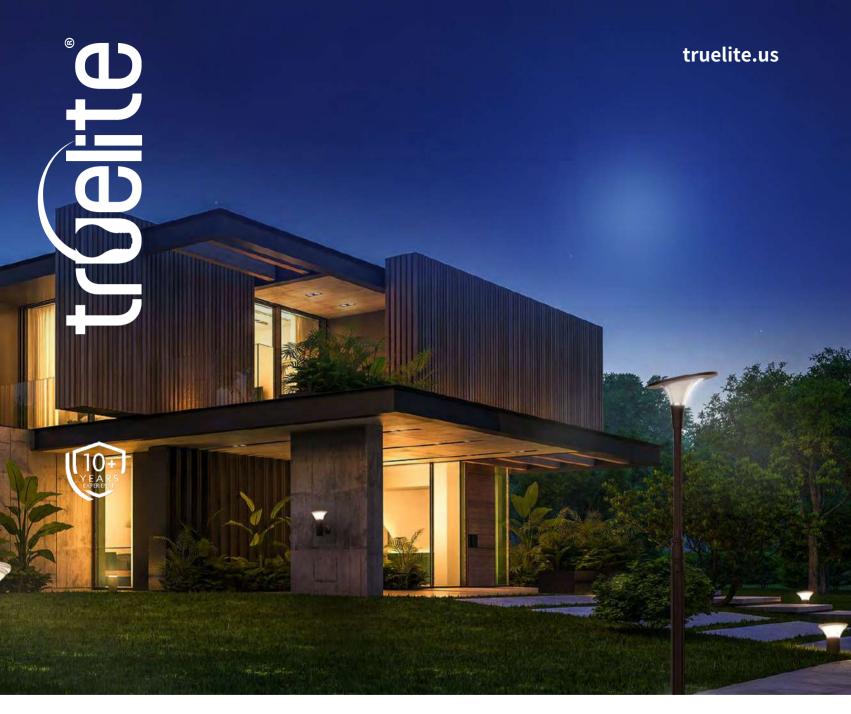


Model No.	TLSBV2-880	TLSBV4-1680	TLSBV4-2480	TLSBV8-3280	
Fixture IP	IP65				
Material	Aluminium Die Casting				
LED Efficacy	175lm/W				
CCT Range	3000K / 4000K / 5000K / 6000K				
Beam Angle	140° *70 °				
CRI	>80	>80			
Luminous Flux	880lm	1680lm	2480Im	3280lm	
Rated Power	4.8±0.5W	9.0±0.5W	13.5±0.5W	18.5±0.5W	
Standard Battery Capacity(24h)	38.4Wh/6.4V	76.8Wh/6.4V	115Wh/6.4V	154Wh/6.4V	
Battery Life Cycles	>2000				
Charge Time	5 Hours				
Discharge Time	>24 Hours				
Control System	Programmable Controller with Wireless Intelligent Control				
Solar Panel	12W 10V	25W 10V	35W 10V	50W 10V	
Cell Type	Poly Crystalline				
Working Temp.	-20 °C ~ 65 °C				
Control Method	Manual ON/OFF / Automatic ON/OFF / Time Control				
Lighting Modes	100% Continuous lighting / Energy saving / Customized modes.				
Product Size	240*168*52mm	375*235*52mm	375*275*52mm	375*275*52 mm	
Body Color	Black/Gray/White				
Certificates	CE, ROHS				













Our backyards and gardens are places of relaxation and close to our heart, and with the same passion we present SunYard the most advanced solar garden light for your nature friendly living.

SunYard efficiently illuminates your recreational living areas, gardens and pathways with 360 degree beam, glare free lighting in solar energy and stand-alone off grid functioning. SunYards are aesthetically designed for comfortable living but elegant styling suitable for

home and hospitality applications with zero operational costs.

Truelite SunYard is highly customizable in terms of color temperatures, luminaire body and column colors to match the garden furniture set ups. Truelite's decade of experience in solar lighting technologies makes SunYard a perfect choice for home users and project customers, contributing to the green energy and reduce carbon footprints.







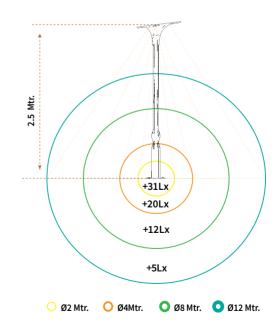








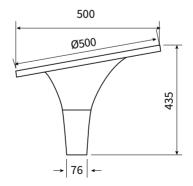
# Light Distribution



MODEL NO -TLSY22W	
LED	Philips Lumileds
LED Efficiency	163lm/W
Luminous Flux	>2800lm
CCT Range	3000K-4000K / 3000K-6000K
Color Rendering Index CRI	>80
LED Life	60000 hrs.
Battery Pack Data - 154Wh	
Nominal Battery Voltage	12.8V
Battery Type	LiFePo4 Lithium Iron Phosphate
Capacity (Ah) @ C10	12Ah
Nominal Energy	≥154Wh
Charging current	10A
Discharging current	10A
Battery autonomy	1 day working plus 2-day autonomy
Working temperature	-20°C to +65°C
Battery Protection	Battery Management System (BMS Protection)
Cycle Life	≥5000 (21A charge/discharge with 50%DOD at 25°C, and residual capacity≥80% Normal capacity.)
Charge Controller - 10mps/1	2V
System voltage	12V
Load maximum power	30W/12V
Maximum solar input power	120W/12V Selected solar power 48Wp
Maximum charging current	10Amps
Over-discharge voltage	9.00V -17.00V settable
Solar Module Data - 48Wp	
Maximum Power Pmax(W)	48 Wp
No of cells	36 cells
Open Circuit Voltage (Voc)	21.6 V
Short Circuit Current (Isc)	2.66 A
Maximum Power Voltage (Vmp)	18 V
Maximum Power Current (Imp)	2.2 A
Module Efficiency (%)	17.20%

Solar Cell Efficiency (%)	20.60%
Module Fire Performance	CLASS C (IEC 61730)
Power Tolerance (%)	± 3%
Operation Period	12 hrs daily auto dimming control
Control Method	Automatic dusk to dawn with Time Control / Manual ON-OFF
Lighting Modes	Energy saving
Environmental Data	
Working Temp.	-20 °C ~ 70 °C
Fixture IP	IP65
Cooling	Conventional
Light Fixture Material	Polycarbonate + aluminium
Relative Humidity (RH)	10%-95%
Mechanical Data	
Product Finish	Gray (RAL7033)
N.W/Light	10kg
G.W/Light	13kg
Light Dimensions	500*435*116mm
Luminaire Fixing	Pole mounted
Warranty	3 Years

# **Product Dimensions**







MINISTER .



#### Truelite America LLC.

Nevada 89052, USA

### MIDDLE EAST

### **Truelite Energy Innovations**

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