



Strata2 HIGHPOWER All In One

Solar LED Street Light

Aesthetically pleasing integrated solar street light system which is compact & ULTRA modern. All components are integrated into a compact neat slimline design utilizing the latest in technology with High Lumen branded LED Package

(LUXEON) 5050 SMDs with a 210lumen per watt led package, MPPT controller, Mono Crystalline Solar cells and LIFEPO4 Lithium battery technology with over 2000 charging & discharging cycles

This range is driven around 170 -180 lumen's per watt for longevity and heat management of the LED PCBs
 If a motion sensor is used on the design we can drive this range up too a 180w 32400 lumens on a sensor based design with a custom lighting profile over a 12 hour period.

Wifi & wireless remote programming and monitoring

IES Files and lighting simulations available on request

FAR SUPERIOR EFFICIENCY DESIGN WITH 25.6V LIFEPO4 BATTERY AND 39V SOLAR PANEL

In addition to increased wattage output, 24 volt battery systems are also more efficient at converting sunlight into electricity compared to 12v battery systems

A higher voltage system is more efficient than a lower voltage since it experiences less energy loss from resistance given the same amount of power draw



Battery design

Simple external battery replacement Single battery configuration with IP68 Connectors

Housing Design

Ergonomically designed for wind resistance up 180Km/Hour and ease of installation

Durability

Intelligent management system

Design

Latest component technology

Temperature

Resistant -20 °C to +65 °C

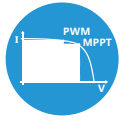
Warranty

5 Year warranty
3 Years on battery

LM-79 LM-80 TM21 **IP66 IP68**

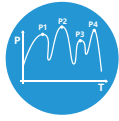


Advantages of the Strata2 Series



MPPT Technology

MPPT is an advanced charge mode whose full name is Maximum Power Point Tracking functionality which can increase the energy utilization rate by 15% to 20% more than a PWM controller.



Multi-Peak MPPT

Strata series solar controller adopts multi-peak MPPT technology, which can timely track the maximum power point and improve the conversion efficiency of solar panels.



Smart 365 Technology

Intelligent solar controller technology (Intelligent power control).

It will intelligently detect recent weather conditions, reasonably controls the discharge power to the batteries to achieve longer operation cycles.



Battery (Intelligent Charge and Discharge)

Using Grade A LiFePO4 battery cells with excellent safety and performance. STARAT2 series unique current equalization and dual protection (software and hardware) enables the battery's capacity to remain at 80% after 2000 cycles. Cycle life is 4 times longer than that of lead-acid batteries.

Housing design



Choice of housing colours in Grey, White, Black or silver & Black

EASY INSTALLATION

5 Minutes to install

Simple battery replacement
Quick access for ease of maintenance

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Strata2

**5050 LED Chips
Higher lumens
per watt**



**170-180
LUMENS
PER WATT**

BATWING LENS LIGHT
DISTRIBUTION CURVE

Light distribution with greater
than 93% uniformity

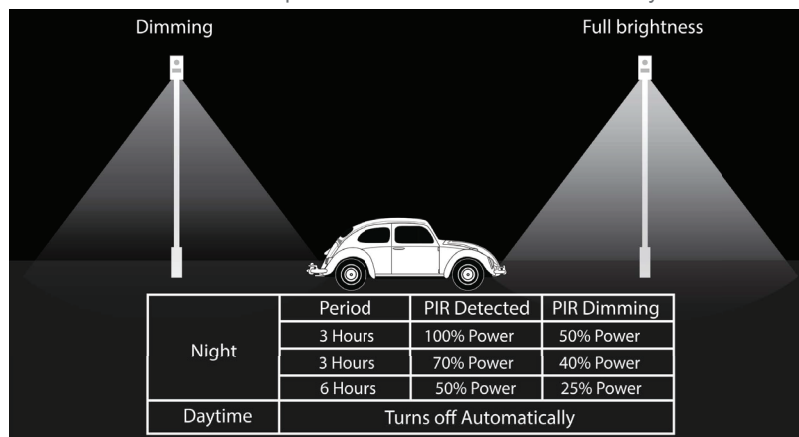
LED LIGHTING

Lumileds
HIGH Lumen LEDs
170 - 180 LM/W

Combined with an integrated LED PCB with high transmittance PMMA Optical lens for optimal heat dissipation with an Aluminum body to ensure maximum heat dissipation Batwing design with SMART PMMA lenses for superb illumination and uniformity

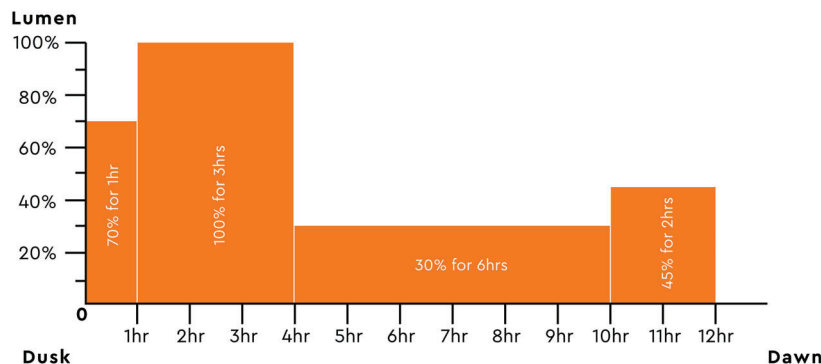
TIME CONTROL + MICROWAVE SENSOR

The Strata2 Series automatically switches ON at dusk and switches OFF at dawn. During the evening the standard sensor models lighting profile will be as follows, When motion is detected the brightness of the luminaire will increase to 100% for a present time of 30 to 60 seconds and once the sensor detects no further movement it will revert back to its determined profile over the 12 hour run cycle.



TIME CONTROL WITHOUT MOTION SENSOR

This mode will give you more light over a night cycle compared to the lighting profiles on the sensor models. We can increase profile settings to achieve a much higher lumen package up too 32400 lumens on a motion sensing variation but not on the time control design unless we reduce the standard preset running time profiles during the 3 or 4 stages of dimming during the night



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STRATA2 MODELS

TECHNICAL SPECIFICATIONS



170 - 180 LUMENS / WATT

5050 LED Chips

Optics: Type 11 / Type 111 - M

**60W
MODULES -
UP to 4 modules**

**5050 SMD PCB
Boards
with
SMART OPTICS**

**Time control models
Models listed below with
preset lighting profile**

60 WATTS

10500 LUMENS

SSLASOLSTRATA280TC

80 WATTS

14400 LUMENS

SSLASOLSTRATA100TC

100 WATTS

18000 LUMENS

SSLASOLSTRATA2150TC

100000 Hours LED life cycle
Optics: type 11 / type 111 M

8 METERS

9-10 METERS

10-12 METERS

LITHIUM IRON PHOSPHATE **LIFEPO4** INCLUDING BATTERY MANAGEMENT SYSTEM BMS

26 - 30 AH 25.6 VOLTS

36-42AH 25.6 VOLTS

48-54 AH 25.6 VOLTS

OVER **20 HOURS** AT FULL CHARGE - 3 NIGHTS IN SMART MODE

CHARGING TIME 6-7 HOURS

OVER 2000 CYCLES - 8 TO 10 YEARS LIFETIME

CERTIFICATION - IEC60598-2-1, 60598-2-3 ; IEC62133

MONOCRYSTALLINE PANEL **GRADE A 25 YEARS**

120 WATTS / 36V

165 WATTS / 36V

185-192 WATTS / 36V

IEC 61215 ; IEC 61730 I ; IEC 60904

MPPT SMART CONTROLLER - IP68

ELECTRICAL PARAMETERS

Charging & discharging protection, over voltage protection

Reverse polarity protection

Charging efficiency up to 98%

IP68 Waterproof connectors

Smart 365 technology ensuring 365 continuous operation

Lighting Profile - TIME CONTROL - 1 hrs 70% , 2.5hrs 100%, 3.5hrs 40%, 5hrs 25%

IEC61347-2-11; IEC62509

ALUMINIUM FRAME & E COATED
MOUNTING COLLARS 64; 76 & 84MM

LM-79 LM-80 TM21 **IP66 IP68**



STRATA2 MODELS

TECHNICAL SPECIFICATIONS



170 - 180 LUMENS / WATT
5050 LED Chips
Optics: Type 11 / Type 111 - M

Motion sensing model
with
MICROWAVE
Motion sensor

Lighting Profile
4hrs 100% dimming to 50%
3hrs 70% dimming to 40%
5hrs 50% dimming to 30%

Sensor is activated for 30
seconds per activation

80 WATTS

14400 LUMENS

SSLASOLSTRATA280M

100 WATTS

18000 LUMENS

SSLASOLSTRATA100M

150 WATTS

27000 LUMENS

SSLASOLSTRATA2150M

8-9 METERS

9-10 METERS

10-12 METERS

LITHIUM IRON PHOSPHATE **LIFEPO4** INCLUDING BATTERY MANAGEMENT SYSTEM BMS

30 AH 25.6 VOLTS

36AH 25.6 VOLTS

42AH 25.6 VOLTS

OVER **20 HOURS** AT FULL CHARGE - 3 NIGHTS IN SMART MODE

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MPPT SMART CONTROLLER, IP68

ELECTRICAL PARAMETERS

Charging & discharging protection, over voltage protection

Reverse polarity protection

Charging efficiency up to 98%

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Lighting Profile

Motion sensing - 3 Hours 100% dimming to 50%, 3 Hours 70% dimming to 40%, 6 Hours 50% dimming to 25%

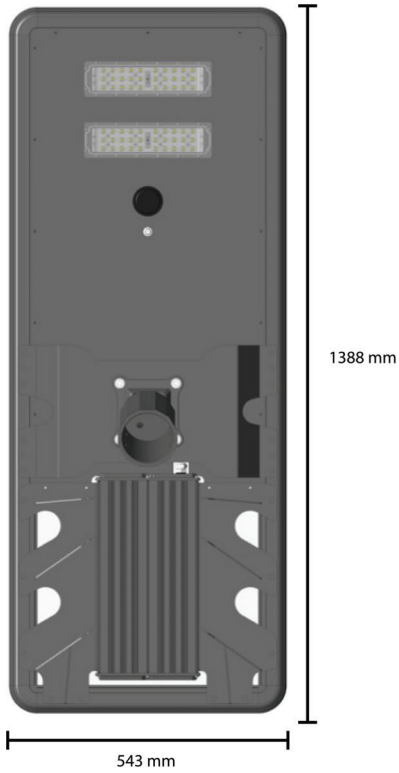
IEC61347-2-11; IEC62509

LM-79 LM-80 TM21 **IP66 IP68**

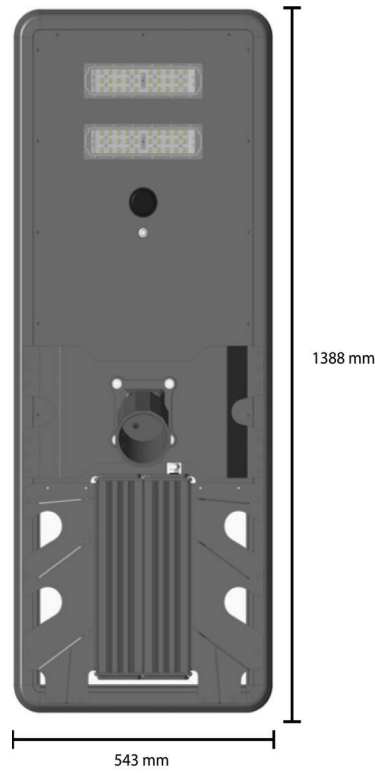


60 / 80 / 100 and 150w Schematics
 SLIP Rotatable collar
 Vertical and side entry

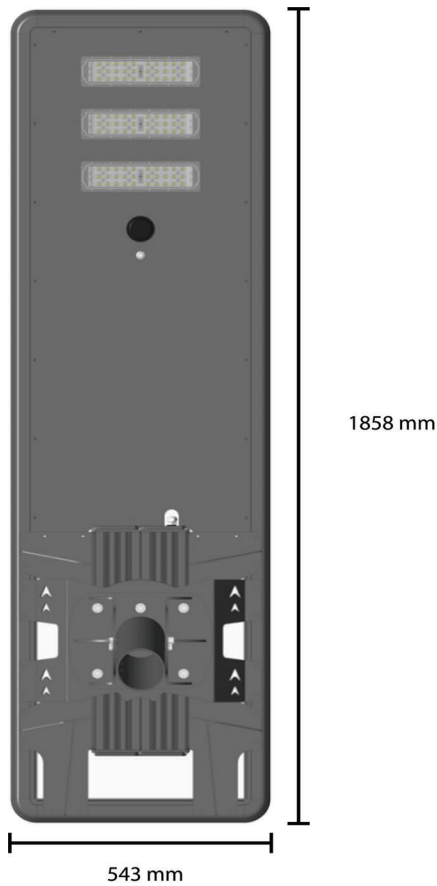
60W
 Packing Dimensions
 1 solar light per box
 1460L X 600W X 160H mm
 Weight 24kGS / Box



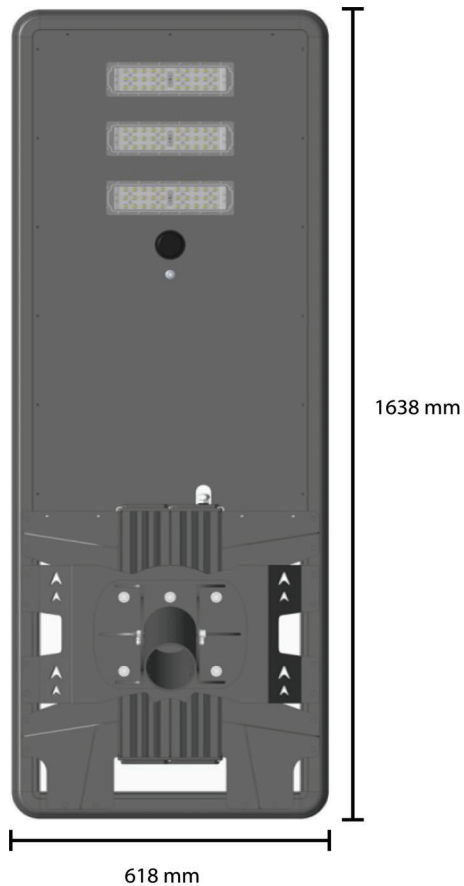
80W
 Packing Dimensions
 1 solar light per box
 1460L X 600W X 160H mm
 Weight 30kGS / Box



100W
 Packing Dimensions
 1 solar light per box
 1868L X 554W X 160H mm
 Weight 35kGS / Box



60W
 Packing Dimensions
 1 solar light per box
 1645L X 635W X 160H mm
 Weight 43kGS / Box



160W Also available with a 210w 39v solar panel design

Multiple Light Distribution Optics

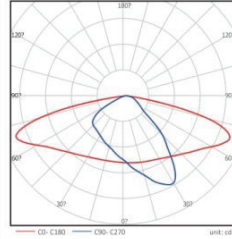
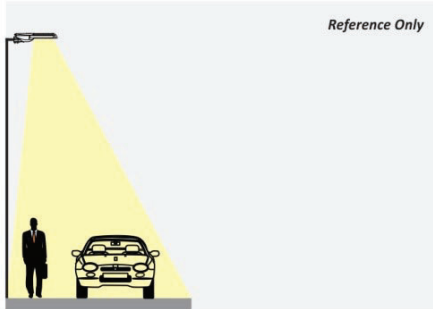
Strata2 Solar LED Street Light

Wide range of Lighting applications: Parks, Estates, Walkways, Roadways and Parking areas.

IESNA standards in providing different Lens optics, Type 1, Type 11, Type 111

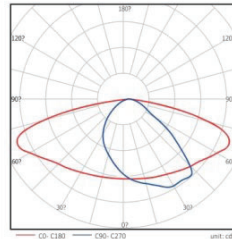
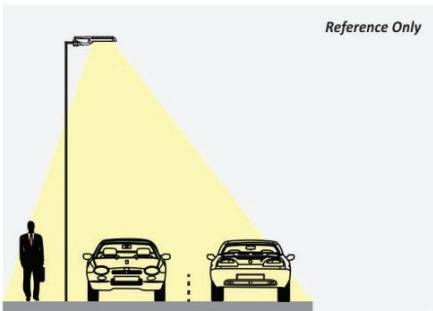
1 Lane, 2 lanes or 3 lanes and other wider lighting variations available

We will assist with a lighting simulation that best suits your requirements.



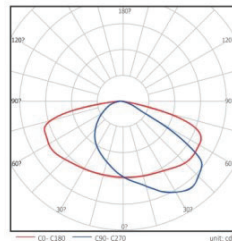
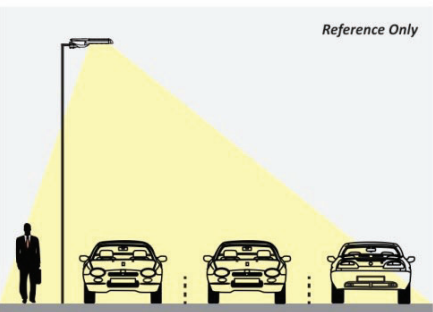
TYPE I

The Type I lens has beam angle of 70° x 140 degrees. In the IESNA Standard, The Type distribution is great for lighting walkways, paths and sidewalks. It is generally applicable to where the mounting height is approximately equal to the roadway width.



TYPE II

The Type II lens has a beam angle of 75° x 155 degrees. In the IESNA Standard, the Type II distribution is used for wide walkways, on ramps and entrance roadways, as well as other long, narrow lighting. It is generally applicable to where the width of the roadway does not exceed 1.75 times the designed mounting height.



TYPE III Medium

The Type III lens has a beam angle of 155° x 70 degrees. In the IESNA Standard, the Type III distribution is meant for roadway lighting, general parking areas and other areas where a larger area of lighting is required. This distribution is intended for luminaires mounted at or near the side of medium width roadways or areas, where the width of the roadway or area does not exceed 2.75 times the mounting height.