

STRATA2ST HIGHPOWER All In One

Solar LED Street Light

160-200w - 28800 - 36000 Lumens

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

(LUMILED) 5050 SMDs with a 210lumen per watt led package, MPPT controller, Mono Crystalline Solar cells and LIFEPO4 Lithium battery technology with over 2000-3000 charging & discharging cycles

This range is driven around 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 200w - 36000 lumens on a sensor based design with a custom lighting profile over a 13 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 45V SOLAR PANEL

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

Design

Temperature

Warranty

Intelligent management system Latest component technology

Resistant -20 °C to +65 °C 5 Year warranty 3 Years on battery

LM-79 LM-80 TM21 **IP66 IP68 IE 150**





Advantages of the STRATA2ST 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



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

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





STRATA2ST MODELS

5050 LED Chips **Higher lumens** per watt

180 **LUMENS PER WATT / DRIVEN**

Optional LENSES available

Light distribution with greater than 93% uniformity

LED LIGHTING Lumileds HIGH Lumen LEDS 180 LM/W

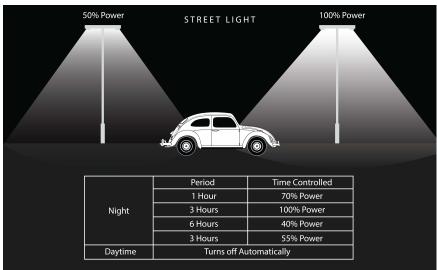
Combined with an integrated LED PCB with high transmittance PMMA Optical lens for optimal heat dissipation with an Aluminum body to ensure maximum heat dissipation Batwing design with SMART PMMA lenses for superb illumination and uniformity

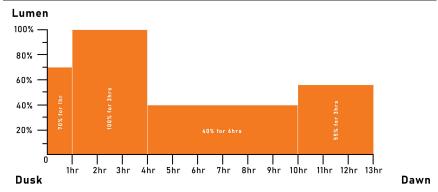
TIME CONTROL WITHOUT MOTION SENSOR

This mode will give you more light over a night cycle compared to the lighting profiles on the sensor models. Motion sensing models have limitations in terms of the sensor reading / activation distances which are limited to 8-9m of height to perform properly.

Time control design with no motion sensor is the perfect solution.

Lighing profile - PRESET as standard





STRATA2ST MODELS

TECHNICAL SPECIFICATIONS

180 LUMENS / WATT

5050 LED Chips

Optics: Type 11 / Type 111-M

4 x 60W LED MODULES

5050 SMD PCB Boards with SMART OPTICS

Time control models Models listed below with preset lighting profile

160 WATTS

200 WATTS

28800 LUMENS

36000 LUMENS

SSLASOLSTRATA2ST160TC

SSLASOLSTRATA2ST200TC

100000 Hours LED life cycle Optics: 30/60 or 90 Degrees

RECOMMENDED POLE HEIGHT

10-12 METERS

10-14 METERS

LITHIUM IRON PHOSPHATE LIFEPO4 INCLUDING BATTERY MANAGEMENT SYSTEM BMS

72AH -1843WH 25.6V

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

MONOCRYSTALINE PANEL GRADE A 25 YEARS

330 WATTS / 45V

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 too 98%

IP68 Waterproof connectors

Smart 365 technology ensuring 365 continuous operation

Lighting Profile - TIME CONTROL - 1 hrs 70%, 3hrs 100%, 6hrs 40%, 3hrs 55%

IEC61347-2-11; IEC62509

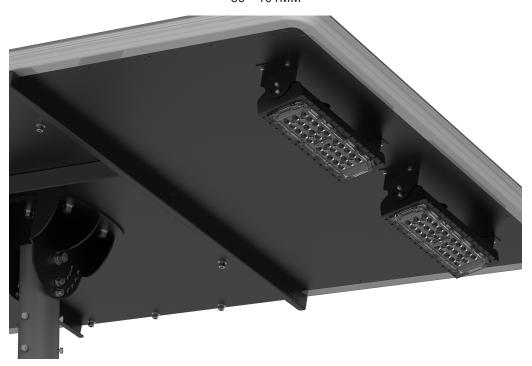
ALUMINIUM FRAME & E COATED MOUNTING COLLARS 89 / 101MM

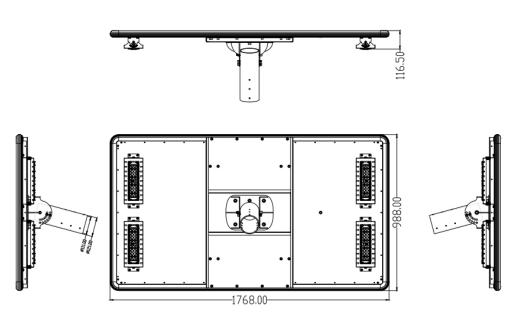






160 and 200w Schematics Slip Rotatable Collar Vertical and Side entry 89 - 101MM





160W
Packing Dimensions
1 solar light per box
1895L X 1125W X 170H mm
Weight 64.5kGS / Box
Collar 440L X 335W X285H
Weight 9.5Kg / Box

200W
Packing Dimensions
1 solar light per box
1895L X 1125W X 170H mm
Weight 64.5kGS / Box
Collar 440L X 335W X285H
Weight 9.5Kg / Box

Multiple Light Distribution Optics

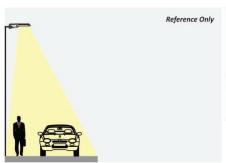
Strata2 Solar LED Street Light

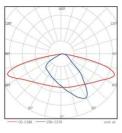
Wide range of Lighting applications: Parks, Estates, Walkways, Roadways and Parking areas.

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 sits your requirements.

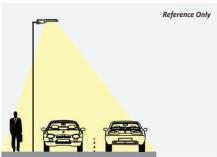


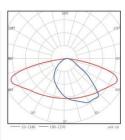


TYPE

The Type I lens has beam angle of 70*140 degrees.

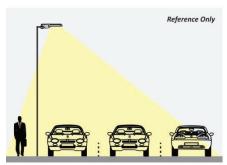
In the IESNA Standard, The Type distribution is great for lighting walkways, paths and sidewalks. It is generally applicable to where the mounting height is approximately equal to the roadway width.

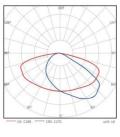




TYPE II

The Type II lens has a beam angle of 75*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*70 degrees. In the IESNA Standard, the Type III distribution is meant for roadway lighting, general parking areas and otherareas 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.

RAL BODY COLOUR CODE



Colour options available on bulk order or projects