

## STRATA2FLHM HIGHPOWER All In One Solar LED Flood - HighMast 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

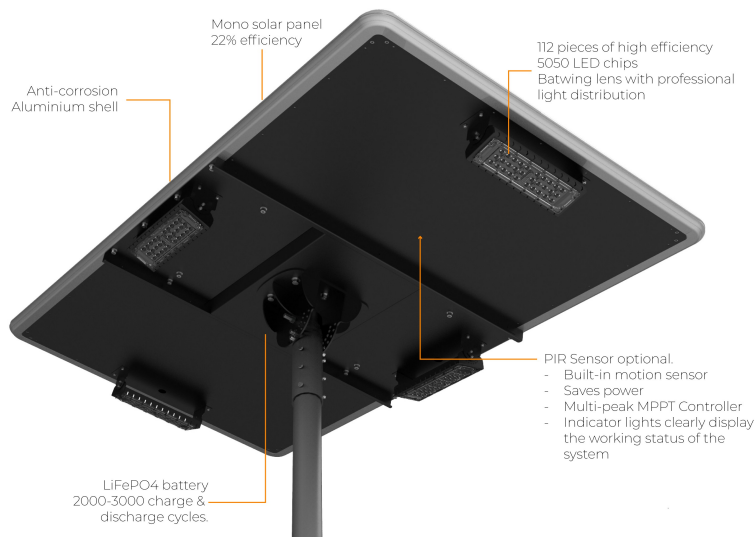
(LUMILED) 5050 SMDs with a 210lumen per watt led package, MPPT controller, Mono Crystalline Solar cells and LIFePO4 Lithium battery technology with over 2000-3000 charging & discharging cycles

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



LED modules are 4 sided or can be supplied as double sided for different applications

#### 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

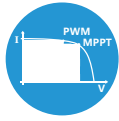
#### Warranty

5 Year warranty  
3 Years on battery

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

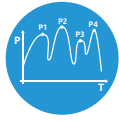


# Advantages of the STRATA2FLMHM Series



## 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

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



# STRATA2FLHM MODELS

**5050 LED Chips**  
**Higher lumens**  
**per watt**

**180 LUMENS**  
**PER WATT / DRIVEN**

**Optional LENSES**  
**available**

**Light distribution with greater**  
**than 93% uniformity**

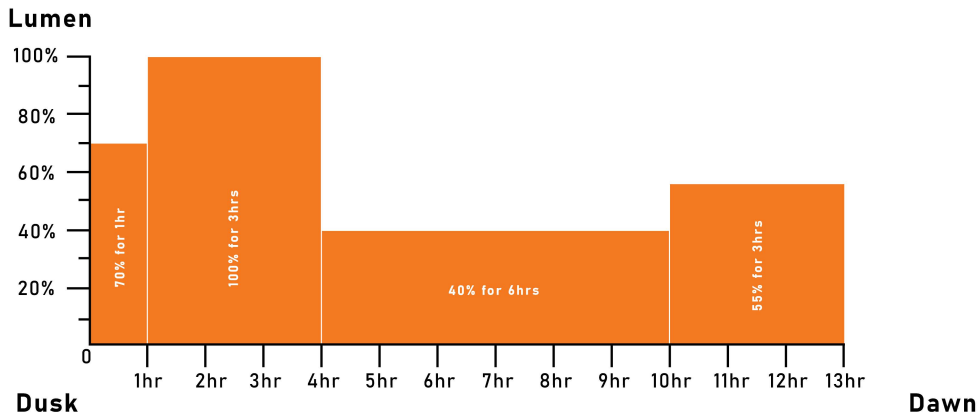
LED LIGHTING  
**Lumileds**  
**HIGH Lumen LEDs**  
**180 LM/W**

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.

### Lighting profile - PRESET as standard



	Period	Time Controlled
Night	1 Hour	70% Power
	3 Hours	100% Power
	6 Hours	40% Power
	3 Hours	55% Power
Daytime	Turns off Automatically	

# STRATA2FLHM MODELS

## TECHNICAL SPECIFICATIONS

180 LUMENS / WATT

**5050 LED Chips**

Optics: 30 / 60 or 90 Degrees

**4 x 60W  
LED MODULES**

**5050 SMD PCB  
Boards  
with  
SMART OPTICS**

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

160 WATTS

**28800 LUMENS**

**SFSOLSTRATA2FLHM160TC**

200 WATTS

**36000 LUMENS**

**SFSOLSTRATA2FLHM200TC**

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

MONOCRYSTALLINE 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%

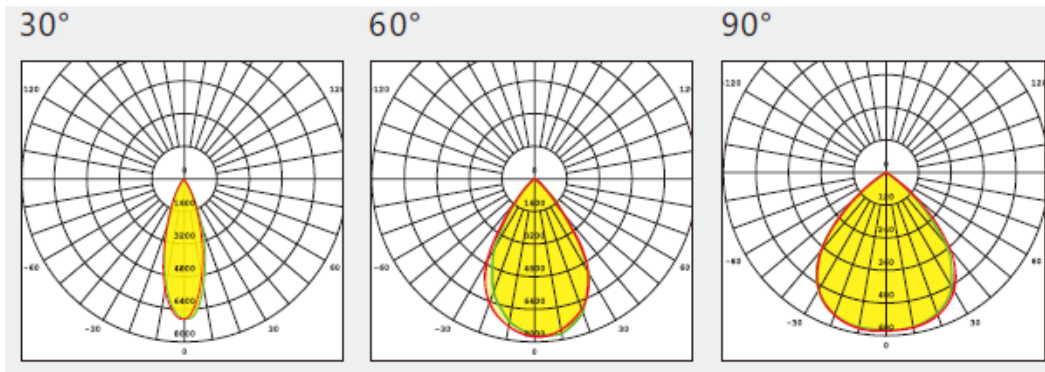
IEC61347-2-11; IEC62509

ALUMINIUM FRAME & E COATED  
MOUNTING COLLARS 89 / 101MM

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

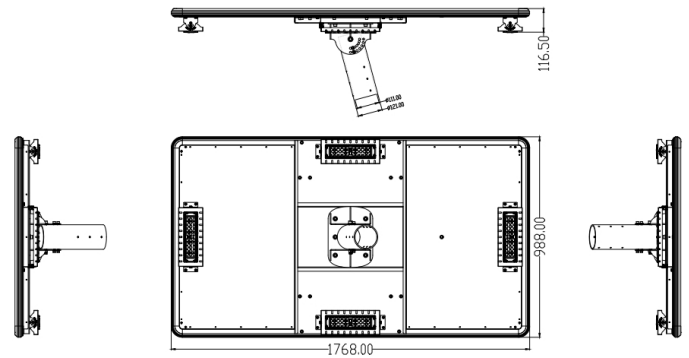


## Multiple Light Distribution Optics



160 and 200w Schematics

Slip rotatable collars - 89 / 101mm



## Packing Dimensions - Weights

### 160w Packing Dimensions

1 x Solar Street Light per box

1895L \* 1125W \* 170H mm

Weight: 64.5Kgs

1 x Collar

440L \* 335W \* 285H mm

Weight: 9.5Kg

### 200w Packing Dimensions

1 x Solar Street Light per box

1895L \* 1125W \* 170H mm

Weight: 64.5Kgs

1 x Collar

440L \* 335W \* 285H mm

Weight: 9.5kG

RAL BODY COLOUR CODE

RAL 7046  
TELEGREY 2

Colour options available on bulk order or projects