INTEGRATED SOLAR STREET LIGHTS 30~120Watt

* **INTEGRATED DESIGN**
* **BIG BATTERY CAPACITY**
* **CONTINUES HIGH POWER**
* **LONG LIFETIME**

All in Two solar street light series are dedicated to provide the real and continuous high brightness output for high-end project. Difference from all in one solar street light,, solar panel of all in two is seperated from solar light head and two parts are are connected to each other directly by universal MC4 connectors directly. Big LifePO4 battery pack with 2-3 days automony and MPPT charge controller are built inside of light fixture. Three models are avaiable as HELIOS for 20W 30W and 50W, HERMES is for 60W and 80W, THOR is for 100W and 120W. All the specification can be customzied accoridng to client's requests.

Profile + Feature

As the pioneer of all in two solar street lights on the market. Auroras has got a high reputation from clients over last years on quality and service. These 3 models are the popular models for commercial lighting because of its lighting performance and quality.

All in two solar led street light is an innovative structure of solar led street light developed since 2016. It adopts the concept of all in one solar led street lights in order to reduce the complication of installation but also maintain the stability and flexibility of regular solar-led street lights whose components are individual.

Additionally, an advanced wireless intelligent control system is available which makes the solar street lights could be monitored and settable online freely. The state of the solar light system could be recorded in the system and all states including the voltage of the battery, solar panel, and led light power is visible at the online control platform. Customers can modify the lighting power and its lighting programs easily as required. An automatic problem alarm is also available which reduces of step and cost of maintenance work a lot.

LED Source

It adopts ultra high brightness of Philips lumileds SMD5050 as light source. Each led chip can be drived to 5W max. With 64pcs of 5050 leds drived by low current, it achieve to more than 150lm per watt. Meanwell it output less heat which will extend the lifetime of LED chip greatly.

Charge Controller

As the CPU of solar led light, high efficiency MPPT solar charge controller are adopted for all lights, With high quality and high efficiency solar charge controller, it can guarantee sufficient power can be generated with limited solar radiation condition.

Lithium Battery Pack

Supber long lifetime LifePO4 battery are adopted for all model of solar street light. Produced with high requirements of management and production by ISO9001 certified factory, lifePO4 battery is able to provide continues and stable power to system for many years without maintainence.

MC4 Connection

Solar light head is to be connected to solar panel with MC4 connectors. it make the installation simple and durable. Seperated solar panel can be freely adjusted as needed. Customer can select a suitable power of solar panel depending on their local solar radiation at will.

Design Aesthetics

It adopted streamlined design concept with better wind resistant performance and appearance. Designed specially for premium quality projects requests.

Green Energy

100% pure energy from sun. No bill for electricity anymore. No pollution. Endless power from nature.

High Luminous Output

Adopted 64pcs of led chips philips SMD5050 as light source ,driven by less rated input current, It reaches high lumens luminous output up to 160lm/watt.

Programmable

Smart MPPT solar controller built-in, Even after the products are installed, the lighting scheme can be reconfigured or adjusted

Helios   **Hermes**   **Thor**

Long Lifetime

Using superb quality battery with long lifetime. deep cycles. Working well in low and high temperatures at -20℃~+65℃. Maintenance free for years without extra cost.

Compact Sturcture

Quality lithium battery with long lifetime and mppt solar controller are built inside of light, Only need to be connected to solar panel via MC4 connectors and turn on

The pioneer model on market based on "PLUG and PLAY" idea. Patents in utility & appearance registered
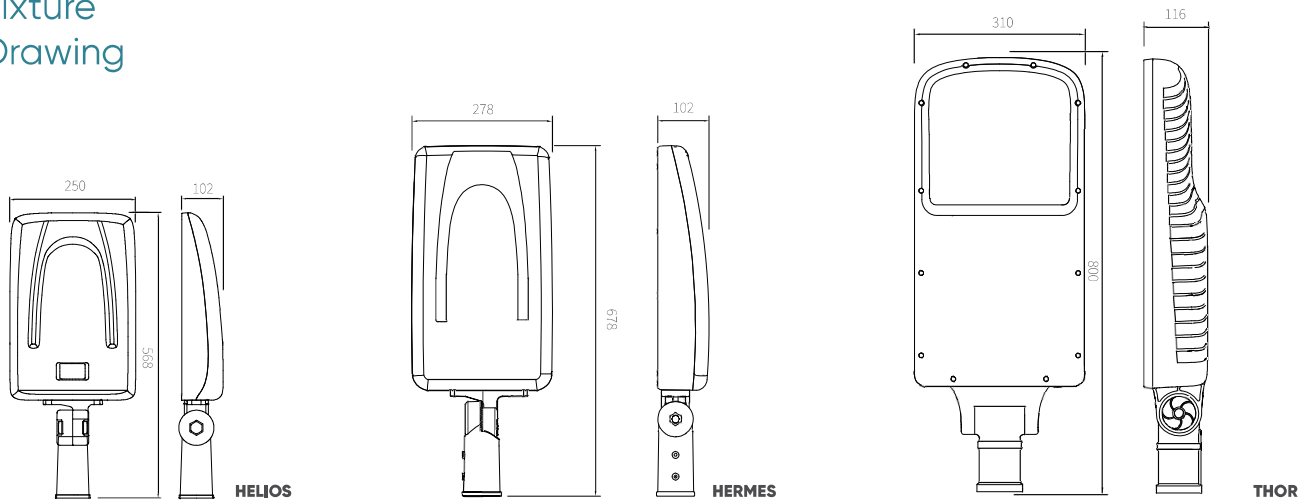
Patented Design

Long Autonomy

Up to 12 hours solar light head can work with 100% power continuously. Using energy saving modes, Autonomy can reach to 3~4 days max without charging.
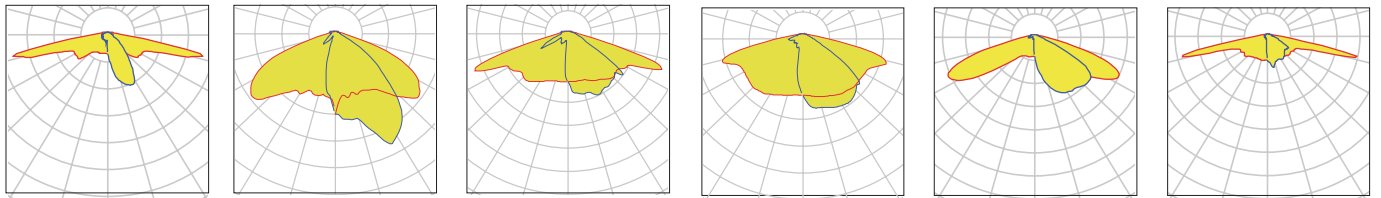
Specification

Item number	HELIOS-T3	HELIOS-T5	HERMES-T6	HERMES-T8	THOR-T10	THOR-T12
Luminous Flux	4,800lm	6,800lm	8,800lm	12,800lm	14,800lm	16,800lm
Rated Power	30W	50W	60W	80W	100W	120W
CRI	>79					
LED Type	Lumileds SMD3030 72pcs		Lumileds SMD5050 64pcs		Lumileds SMD5050 64pcs	
CCT Range	3000K / 4000K / 5000K / 6000K					
Beam Angle	Type I / II / III / III optics optional from LEDiI					
Battery Capacity	307WH 12.8V	460WH 12.8V	538WH 12.8V	768WH 25.6V	921WH 25.6V	1075WH 25.6V
Battery Type	Brand new LifePO4 32700 6000mA 3.2V					
Battery Lifetime	D.O.D 50% 4000 cycles					
Charge Time	4 hours					
Discharge Time	>24 hours					
Advancded Control System	Hybrid type Solar + 220V backup / Zigbee 2G/4G Wireless Control					
Regular Solar Panel	80W 18V	100W 18V	120W 36V	160W 36V	200W 36V	260W 36V
Vertical Solar Module	140W 18V	280W 36V	340W 36V	400W 36V	540W 36V	600W 36V
Cable & Connector	2.5mm 0.6 meters with MC4 connectors					
Working Temp.	-20℃ ~ 75℃					
Control Method	Automatic dusk to dawn / Time Control / Manual ON-OFF					
Default Lighting modes	6 hours 100% + 6 hours 50%, 12 hours operation					
Fixture Size	HELIOS: 568*250*102mm		HERMES : 678*278*102mm		THOR : 800*310*116mm	
Fixture materials	Aluminium Die Casting					
Fixture color	Gray RAL7005					
N.W/Light	9.60kg	10.60kg	14.30kg	15.40kg	13.50kg	19..60kg
G.W/Light	10.30kg	11.20kg	15.30kg	16.40kg	20.40kg	21.80kg
IP Rate	IP67					
Warranty	3 years					
Certificates	CB CE ROHS IP67 LM79 LM80 FCC					

Fixture Drawing

250 | 102
568

HELIOS

278 | 102
678

HERMES

310 | 116
800

THOR

LED Optics Optional

T2-L
IESNA Type II
(long)

T2-S
IESNA Type II
(short)

T3
IESNA Type III
(medium)

T3B
IESNA Type III
(medium min backlight)

T3-M
IESNA Type III
(medium)

T3-L
IESNA Type III
(long)

MPPT Charge Controller

Model number	MES60 (for T3 &T5)	DM80 (for T6 & T8)	DM120 (for T10)	DM160 (for T12)
System voltage	12V	12V	24V	24V
Output current range	50~3000mA	50~5600mA	50mA~4200mA	50mA～5600mA
Max. power of regular solar panel	130W/18V	200W/18V	260W/36W	400W/36W
Max. power of vertical solar module	400W/18V	500W/18V	600W/18V	800W/18V
MPPT tracking efficiency	98%			
Load output voltage	<60V	<35V	<60V	<60V
Max load power	60W	80W	120W	160W
Overcharge voltage	14.6V	14.6V	29.2V	29.2V
Overcharge recovery voltage	13.5V	13.5V	27V	27V
Over-discharge voltage	11.0V	11.0V	22.0V	22.0V
Over-discharge recovery voltage	12.4V	12.4V	24.8V	24.8V
Light control voltage	7V			
Operating temperature	-35 ℃ ~ 65 ℃			
Net weight	380g	400g	400g	510g
Dimension(mm)	80*82*22.6mm	114*88.3*24.5mm	114*88.3*24.5mm	155*114.4*34mm
IP rate	IP68			
Warranty	3 Years			

Quality LifePO4
Lithium Battery

Main Features

- Lithium Iron Phosphate (LiFePO4) Battery
- Safest lithium chemistry with high energy density
- Built-in automatic protections
- Efficient & long-lasting up to 4000+ cycles DOD 50%
- >2000 cycles @0.2C, Charge/Discharge at 100% DODInternal cell balancing
- Wide temperature range: -20℃ ~ 70℃
- Maintenance free after installation
- Cost effective

Battery Spec	12V-24AH	12V-36AH	12V-42AH	24V-36AH	24V-42AH	12V-24AH
Battery cell type	LifePO4 6000mA 3.2V 32700					
Nominal Capacity	12.8V 24AH (307WH)	12.8V 36AH (460WH)	12.8V 42AH (768WH)	25.6V 30AH (768WH)	25.6V 36AH (921WH)	25.6V 42AH (1075WH)
Quantity per pack	16 pieces	24 pieces	28 pieces	40 pieces	48 pieces	56 pieces
Array Mode	4P4S	6P4S	7P4S	5P8S	6P8S	7P8S
Dimension (L*W*H)	140*240*75mm	210*240*75mm	210*240*75mm	210*240*75mm	210*240*75mm	210*240*75mm
Charge mode	C.C + C.V					
Charge Cut-off voltage	14.6±0.05V	14.6±0.05V	29.2±0.05V	29.2±0.05V	29.2±0.05V	29.2±0.05V
Discharge Cut-off Voltage	11±0.05V	11±0.05V	22±0.05V	22±0.05V	22±0.05V	22±0.05V
Storage Temperature	+5℃ ~ +35℃					
Operating Temperature	-25℃ ~ 65℃					
Lifetime (D.O.D. 50%)	4,000 cycles D.O.D 50%					
Warranty	3 Years					

Monocrystalline
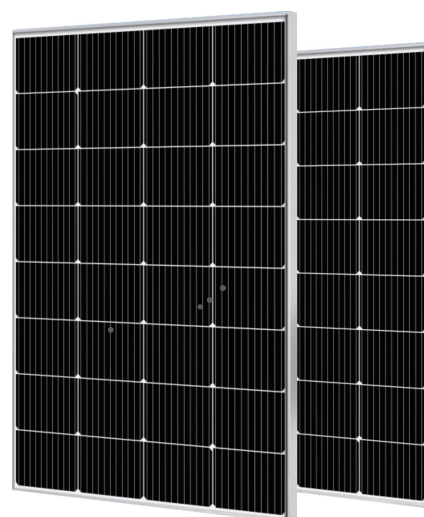# Solar Panel

Certifications

- IEC61215, IEC61730 •
- ISO9001:2015 Quality Management Systems •
- ISO45001 : Enbvironmental Management Systems •
- ISO45001:2018 Occupational Health and Safety Management System •

STC : Light intensity 1000W/㎡   Battery temperature : 25 C   Asmosphere quality = 15

NOCT : Light intensity 800W/㎡   Battery temperature : 20 C   Asmosphere quality = 15   Wind velocity 1m/s

Model number	MSD-080W	MSD-100W	MSD-120W	MSD-160W	MSD-240W	MSD-300W
Peak power / Pm(W)	18.0V	18.0V	18.0V	18.0V	36.0V	36.0V
Max. power voltage / Vmp(V)	6.67A	6.67A	6.67A	8.89A	6.67A	8.34A
Solar cells efficiency	22.3%	21.3%	21.3%	21.3%	21.3%	22.3%
Dimensions(L*W*T)	550*760*30mm	680*760*30mm	800*760*30mm	1040*760*30mm	1530*760*30mm	1290*1134*35mm
Grade of solar cells	A grade					
Cable & connector	0.9M solar cable + MC4 connectors					
Operating temperature range	-40℃ ~ 85℃					
Power output warranty:	IP65					
IP rate	10 years > 90%, 25 years > 80%					
Product Certifications / Standards	CE, ROHS ISO9001:2008, RoHSCE, IEC61215					