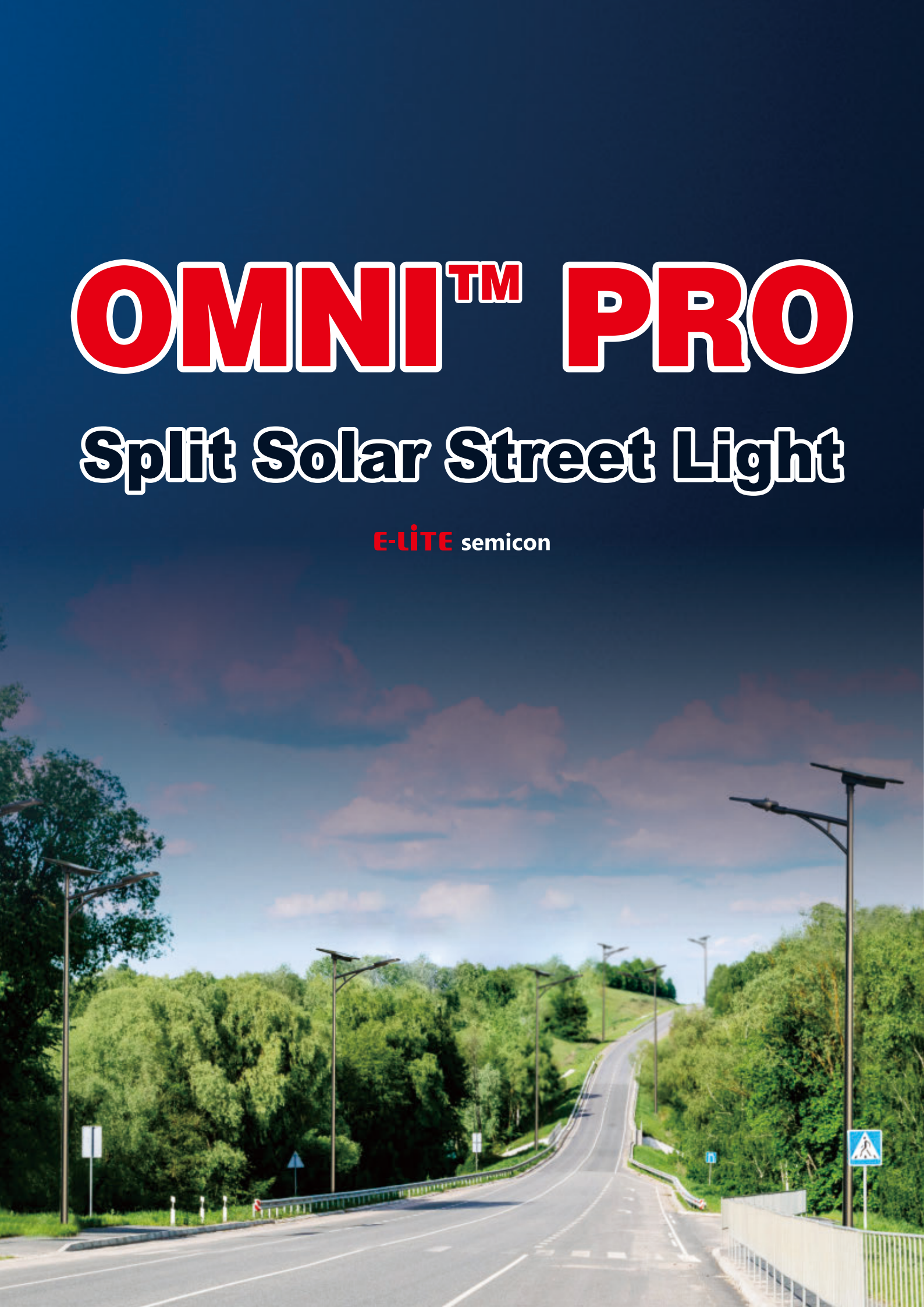
OMNI™ PRO

Split Solar Street Light

E-LİTE semicon



CRAFTED WITH PRECISION

Advanced Modular Solar Street Light with Die-Cast Housing

This solar-powered bifurcated street luminaire integrates a die-cast aluminum alloy housing, ensuring exceptional heat dissipation and structural resilience. Its innovative design features a modular array of high-efficiency LEDs, strategically arranged to deliver uniform illumination while optimizing energy utilization. The optical system is equipped with swiftly replaceable lenses, allowing for effortless customization of light distribution patterns to suit diverse road conditions. This versatile solution combines robust engineering with sustainable performance, offering enhanced durability and minimal maintenance for modern smart city applications. The seamless fusion of advanced thermal management and modular functionality exemplifies a forward-thinking approach to eco-friendly public lighting.

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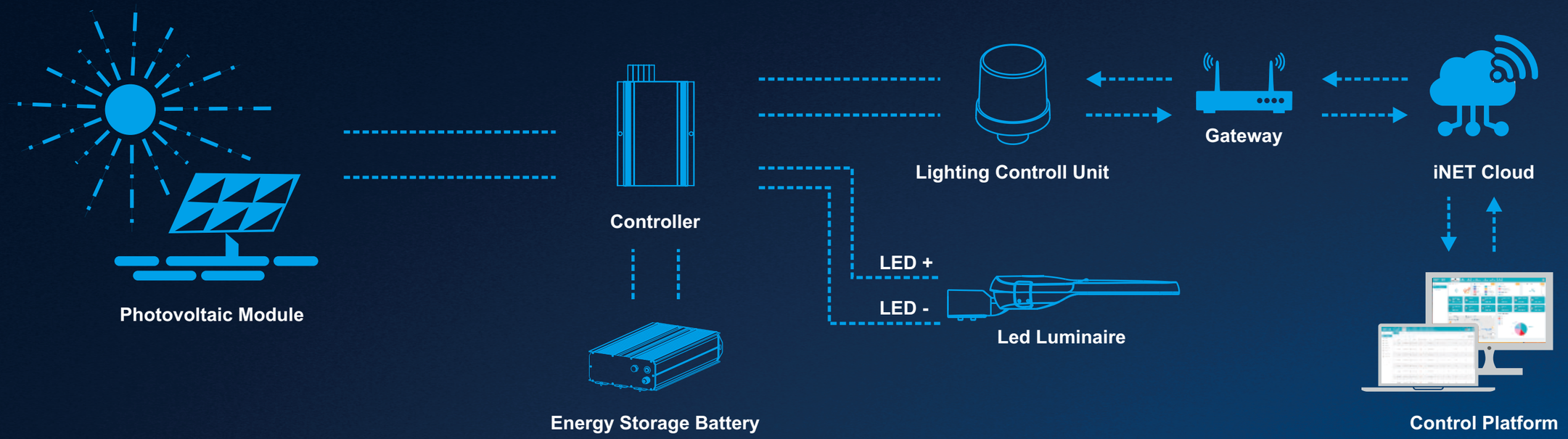

OUR FIXTURE CAN DO

- The entire lighting system is guaranteed for 5 years
- Using Grade A+ battery cell, the battery cycle life more than 4000 times
- Premium-grade All-in-two Design, Easy to Install and Maintain.
- High Luminous Efficiency of 207~230lm/W to Maximize Battery Performance.
- Light On/off and Dimming Programmable Smart Lighting.
- IP66 Luminaire Ensures Long Lasting and Consistent High Performance.
- Zero carbon emission
- No Trenching or Cabling Work Needed.

OUR SYSTEM CAN DO

- 7*24 battery life monitoring, battery life cycle reminder, work report
- Precise Battery Monitoring
- Built-in GPS Tracking for Product Security
- AI Enabled Pole/Light Tilt Alarm
- Remote Real-time Monitoring and Management
- Flexible and Adjustable Work Mode
- Powerful Data Collection and Analysis Functions
- Seamless Integration of Charge Controllers with IoT System

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APPLICATIONS

- Roads & Highway Lighting
- Car park & Perimeter Lighting.
- Security & Entrance Lighting.
- Temporary & Event Lighting.
- Rural & Remote Area Lighting.
- Mining & Industrial sites.
- Coastal Areas and Jetties.
- Public Area Lighting.
- Construction Sites.

Only top quality mono - crystalline silicon solar panels with high efficiency and long lifetime are used.

Highly efficient controller to charge your batteries and intelligent microprocessor controlled algorithms for light management ensure maximum uptime.

Quality lithium batteries are used to store the energy, provide energy for immediate requirements, and enable a back-up for days when there is little or no sun.

High Lumen LED for maximum efficacy. Dedicated designed low-voltage solar controller technology with dimming capabilities for power-save management. Lifetime > 50,000 hrs and CRI nominal 70.

Microprocessor managed algorithms autonomously determine sunrise and sunset

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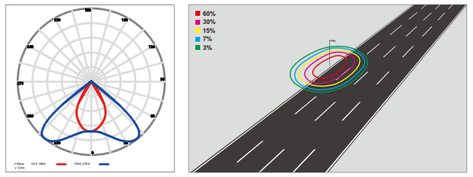
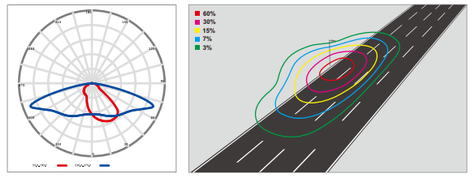
PHOTOMETRICS

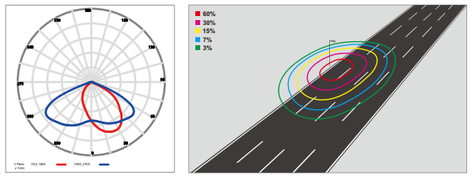
60×100°（TYPE Ⅰ-VS）



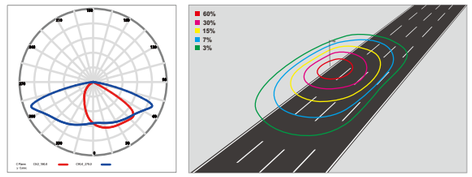
65×155°（TypeⅡ-M）



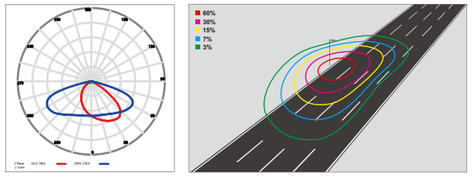
70×135°（TYPE Ⅱ-S）



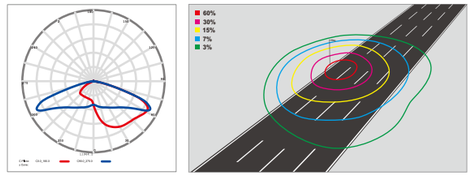
75×150°（TYPEⅢ-M）



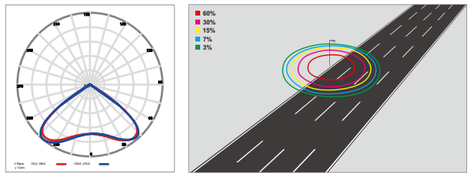
80×150°（TYPE Ⅲ-S）



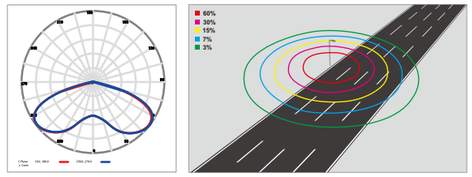
65×145°（TypeⅣ-S）



110°（TYPE Ⅴ-VS）



150°（TYPE Ⅴ-VS）



Default setting: 6m high Installation, 100% brightness.

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PERFORMANCE

	20W~200W
	207~230lm/W
LEDS	Philips Lumileds
DIM	PIR & Microwave & Timer Dimming
Control	MPPT / PWM Controller
CCT	5000K (2500~6500K optional)
IES	60×100°/ 65×145°/ 65×155° / 70×135° / 75×150° / 80×150° / 110° / 150°
	IP66
IK	IK08
	Monocrystalline silicon photovoltaic panels
	LiFeP04 battery
	Slip fitter
	(Standard LiFePO4:Charge:0°C to 60°C / 32°F to 140°F & Discharge:-20°C to 60°C / -4°F to 140°F) (Advanced LiFePO4:Charge:-20°C to 60°C / -4°F to 140°F & Discharge:-20°C to 60°C / -4°F to 140°F) Storing Temperature:-20°C to +60°C/-4°F to 140°F

CE RoHS

SPECIFICATIONS

Built-in Battery

Part#	Power	Modules	Efficacy (LED Module)	Solar Panel			Battery	Light Fixture	
				Capacity	N.W	Dimensions		N.W	Dimensions
EL-STOM-20	20W	4	230lm/W	60W/18V	5kg	660×620×33mm	12.8V/18AH	10kg	790×320×190mm
EL-STOM-30	30W		228lm/W				12.8V/24AH	10.5kg	
EL-STOM-40	40W		224lm/W	90W/18V	6.5kg	770×710×33mm	12.8V/30AH	11kg	
EL-STOM-50	50W		220lm/W				12.8V/36AH	11.5kg	

External Battery

Part#	Power	Modules	Efficacy (LED Module)	Solar Panel			Battery			Light Fixture	
				Capacity	N.W	Dimensions	Capacity	N.W	Dimensions	N.W	Dimensions
EL-STOM-20	20W	4	230lm/W	60W/18V	5kg	660×620×33mm	12.8V/18AH	3.1kg	133×239.6×89mm	8.5kg	790×320×120mm
EL-STOM-30	30W		228lm/W				12.8V/24AH	3.9kg	203×239.6×89mm	8.5kg	
EL-STOM-40	40W		224lm/W	90W/18V	6.5kg	770×710×33mm	12.8V/30AH	4.5kg			
EL-STOM-50	50W		220lm/W				12.8V/36AH	5.0kg			
EL-STOM-60	60W		215lm/W	120W/18V	8.5kg	910×810×33mm	12.8V/48AH	6.4kg	273×239.6×89mm	8.7kg	
EL-STOM-80	80W		207lm/W	160W/36V	11kg	1150×850×33mm	25.6V/30AH	7.8kg	333×239.6×89mm	8.7kg	
EL-STOM-90	90W		218lm/W				25.6V/30AH	7.8kg			
EL-STOM-100	100W		218lm/W				25.6V/36AH	8.9kg			
EL-STOM-120	120W		217lm/W	250W/36V	15kg	1210×1150×33mm	25.6V/48AH	11.6kg	433×239.6×89mm	9kg	
EL-STOM-150	150W		215lm/W				25.6V/48AH	11.6kg			
EL-STOM-180	180W		212lm/W				25.6V/54AH	12.8kg			
EL-STOM-200	200W		210lm/W	300W/36V	17kg	1430×1150×33mm	25.6V/60AH	14.2kg	540×227×94mm	9kg	

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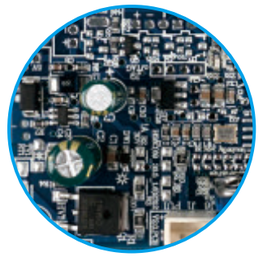
SMART ANTI THEFT DESIGN

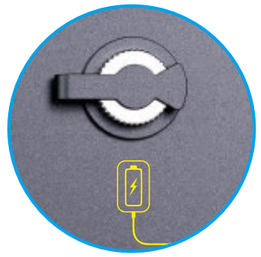
Real-Time Geo Tracking

The real-time mini Geo anti theft tracking device is fitted in an un-accessible location of the solar street light fixture, which is permanently powered to enable security recovery teams to track and locate the solar lights anywhere via the live app to recover the product and arrest the thieves as long as the the solar light battery has power.



PRECISE BATTERY STATUS MONITORING

The solar light features a high-precision coulometer, also known as a coulomb meter, which provides accurate readings on battery performance by measuring its current. It can detect and display, in real-time, the battery's voltage, current, power, actual capacity, remaining time, and other key parameters, ensuring you have an accurate understanding of the battery's status at all times.



STAY POWERFUL THE DC CHARGE PORT

A DC charge port is offered as an option to be integrated into Talos **II** , ensuring the battery remains charged even during extended periods in the warehouse. No more worrying about flat batteries when you need them the most. Embrace the continuous and dependable lighting with our state-of-the-art Talos **II** solar street light.

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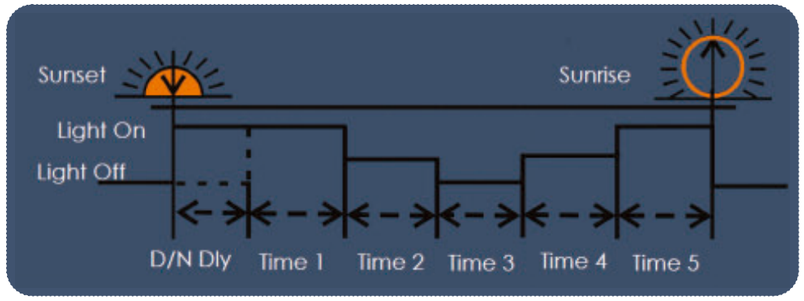
SOLAR CONTROLLER - B

Regular MPPT Controller

Five-Stage Mode

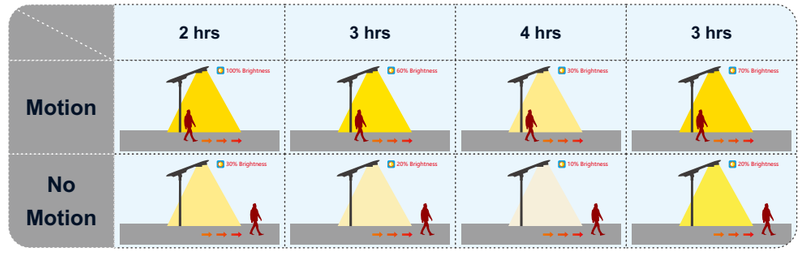
The lamps lighting divide into 5 stage, each stage time and dim can be setting according to demands. With diming setting, it is an efficient way to save energy, and keep the lamp working in best power and time.



Motion Sensor Mode

Motion: 2 hrs-100%; 3 hrs-60%; 4 hrs-30%; 3 hrs-70%;

Without Motion: 2 hrs-30%; 3 hrs-20%; 4 hrs-10%; 3 hrs-20%;



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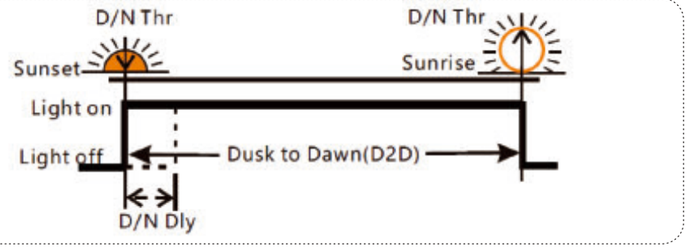
SOLAR CONTROLLER - C

Hybrid MPPT Controller

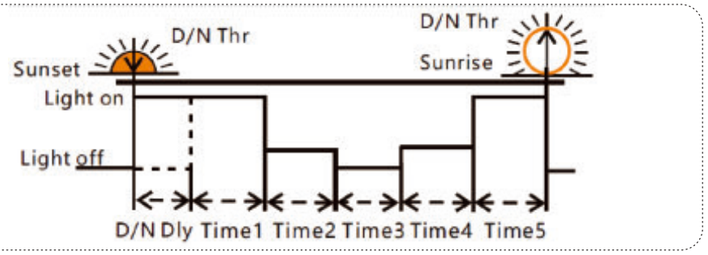
Dusk to Dawn (D2D)

When fixture is set to D2D, it works in dusk to dawn mode. The fixture will turn on while the sun is down, as determined by the solar panel voltage.



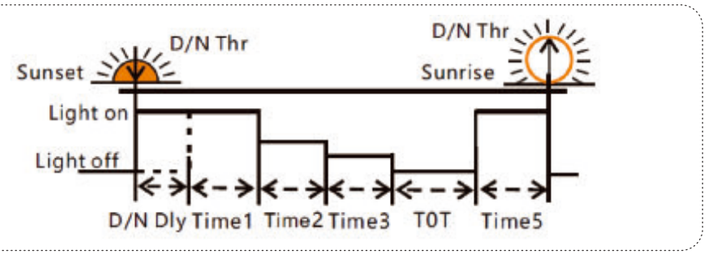
Five-stage Night Mode

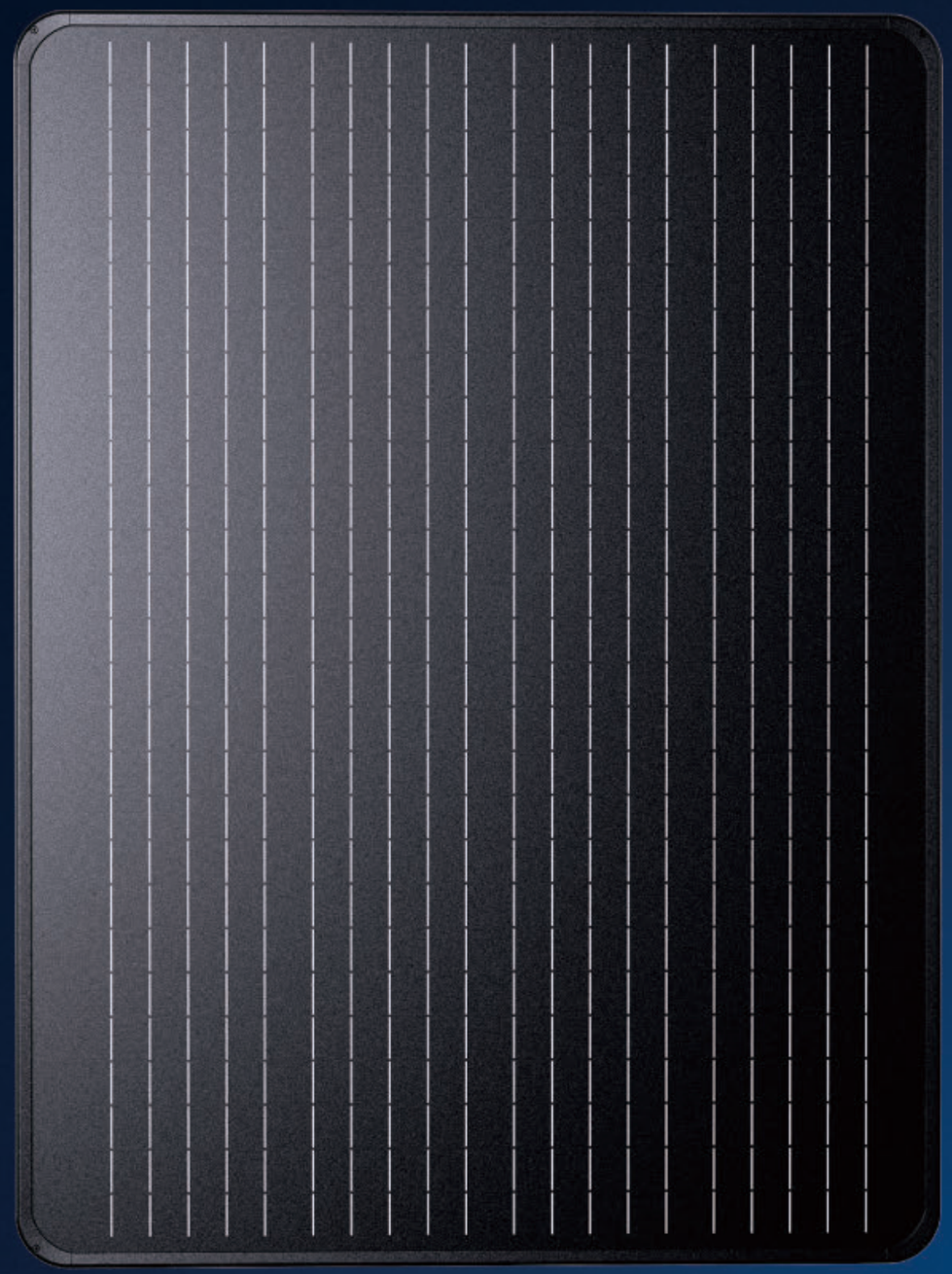
The lamps lighting divide into 5 stage, each stage time and dim can be setting according to demands. With diming setting, it is an efficient way to save energy, and keep the lamp working in best power and time.



TOT Mode (Can set the load on time before morning coming.)

When fixture is set to T0T then it will determine Time4 based on Time5 and previous data on the time of sunrise.





MONO SOLAR PANEL

Higher Durability

The multi-busbar design can decrease the risk of the cell micro- cracks and fingers broken.

High Power Density

High conversion efficiency 23% and more power output persquare meter, by lower series resistance and improved light harvesting.

PID Resistant

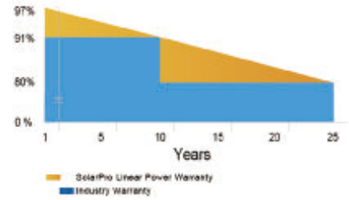
Tested in accordance to the standard IEC 62804, our PV modules have demonstrated resistancea gainst PID (Potential Induced Degradation), which translates to security for your investment.

Bigger Cells with better performance

A slight increase of the size of our cells, Boosts the performance of the newest modules by six percent on average.

First-class Quality Assurance

- 10-year warranty for material and technology.
- 25-year linear power output warranty.



Specifications

Maximum Power (Pmax/W)	60	90	120	160	250	300
Open Circuit Voltage(Voc/V)	22.8			43.2		
Short Circuit Current(Isc/A)	3.48	5.21	6.91	4.65	7.15	8.45
Maximun Power Voltage(Vmp/V)	18V			36V		
Maximum Power Current(Imp/A)	3.3	5	6.7	4.4	6.9	8.3
Module Efficiency(%)	24					
Output Tolerance(%)	±3					
Operating Temperature	-40°C~+85°C					
Wind Load/Snow Load	2400pa/5400pa					
NOCT	45±2°C					
Temp Coefficient of Isc	+0.046%/°C					
Temp Coefficient of Voc	-0.275%/°C					
Temp Coefficient of Pmax	-0.350%/°C					

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HIGH PERFORMANCE BATTERY PACK GRADE A+ CELL

LiFePo4 batteries have a higher energy density they can store more energy in a smaller and lighter package.
This makes them ideal for applications where weight and space are a concern.

Advantage of LiFePO4

- A Long Lifespan
- No Active Maintenance
- Lightweight Champion
- High Efficiency
- Safety
- High Discharge Rates
- Extreme Temperatures
- Rechargeable Multiple Times

Specifications

Capacity	18Ah	24Ah	30Ah	36Ah	48Ah	30Ah	36Ah	48Ah	54Ah	60Ah
Nominal Voltage	12.8V					25.6V				
Charging Voltage	14.6V					29.2V				
Load Voltage	≥12V					≥24V				
Standard charging method	5A(CC)charging to14.6V; After CV(DC 14.6V) Charge until charging current≤0.02C					5A(CC)charging to 29.2V; After CV(DC 29.2V) Charge until charging current≤0.02C				
Max charging current	≤10A					≤20A				
Max discharge current	≤10A					≤20A				
Over current	≤10A					≤20A				
Cut OFF discharge Voltage	10V					20V				
Operating temperature range	Standard LiFePO4： Charge:0°C to 60°C / 32°F to 140°F & Discharge:-20°C to 60°C / -4°F to 140°F) Advanced LiFePO4： Charge:-20°C to 60°C / -4°F to 140°F & Discharge:-20°C to 60°C / -4°F to 140°F)									
Storage	-20℃~60℃									
Battery category	LiFePO4									
Cycle life	≥4000									

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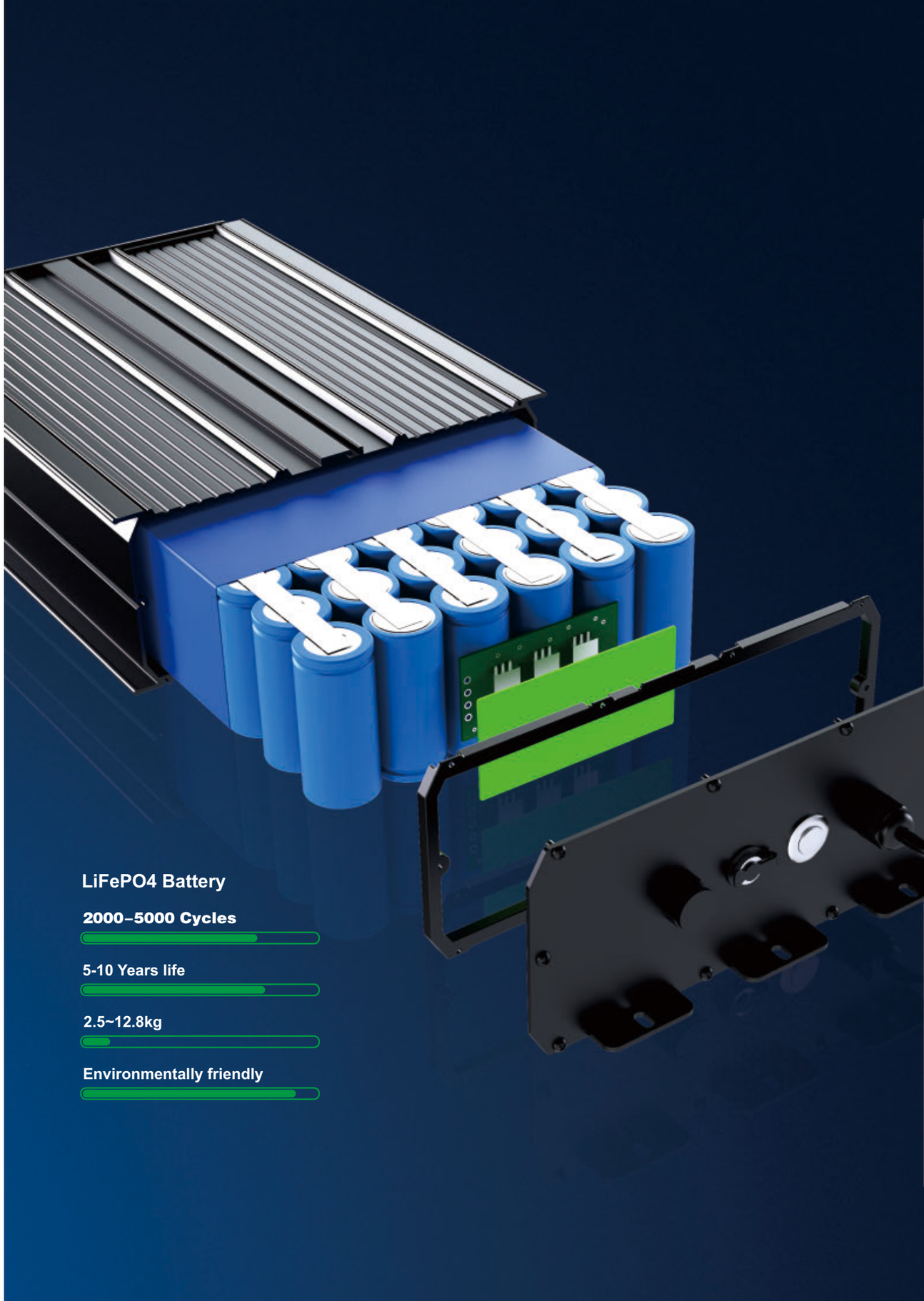
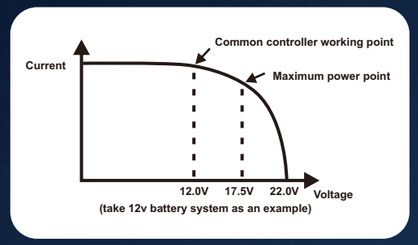


MPPT CHARGE CONTROLLER

Features

- Innovative Max Power Point Tracking(MPPT) technology,tracking efficiency >99.9%
- Full digital technology, high charge conversion efficiency up to 97.5%,discharge conversion efficiency up to 96.5%
- Can output constant current (output current can be set)
- 5 stages time and dimming can be adjusted
- Can read parameters and running status
- If battery voltage is low, it can be set to dimming
- Dimming start voltage and percentage can be set
- Day/Night threshold can adjust automatically
- AGM, Liquid, GEL and Lithium battery for selection
- 0℃ Charging Protection(Lithium)
- When BMS power off because of LVD, it can activate the system automatically
- Four stages charge way: MPPT, boost, equalization, float
- IP67, Strong and durable aluminum caseFull automatic electronic protect function



Indicator Functions

LED	Status	Function
Green LED	On	Solar panel is correctly connected,but not charged
	Fast flash(0.1s/0.1s)	Charging
	Flash(0.5s/0.5s)	Equal or Boost Charging
	Slow flash(0.5s/2s)	Float Charging, Lithium constant voltage charge
Yellow LED	Off	Over voltage protection
	On	Battery is normal
	Slow flash(0.5s/2s)	Battery voltage is low
	Fast flash(0.1s/0.1s)	Low voltage protection
Red LED	Off	Work normal (Standard version)
	On	The output power is 0
	Super slow(0.2s/5s)	Open circuit protection
	Flash(0.5s/0.5s)	Over temperature
	Fast flash(0.1s/0.1s)	Short circuit or Over current protection

Specifications

Battery Parameters	System Voltage	12V	12V/24V	12V/24V	12V/24V
	Max Charging Current	8A	10A	15A	20A
	Battery Type	Lithium			
	Charging Volt. Target	10.0~17.0V (Programmable, default:12.6V)	10.0~32.0V(Programmable, default: 12.6V)		
	Charging Volt. Recovery	9.2~16.8V (Programmable, default:12.4V)	9.2~31.8V(Programmable, default: 12.4V)		
	Low voltage disconnect	9.0~15.0V (Programmable, default:9.0V)	9.0~30.0V(Programmable, default: 9.0V)		
	Low voltage reconnect	9.6~16.0V (Programmable, default:9.8V)	9.6~31.0V (Programmable, default: 9.8V)		
	0℃ Charging protection	Yes, Slow, No(Programmable)			
Panel Parameters	Max volt on PV terminal	60V		55V	55V
	Max input power	100W~120W	130W/260W	200W/400W	260W/520W
	Dusk/Dawn detect volt.	3.0~8.0V（Programmable）	3.0~20.0V （Programmable）		
	Day/Night delay time	0~30min（Programmable）	0~30min（Programmable）		
	MPPT tracking range	（Battery Voltage +1.0V） ~Voc×0.9			
Load Parameters	Output Power	1~60W	10~60W/20~120W	10~90W/20~180W	
	Output Voltage	20 ~ 55V	15~60V/35~60V	20~55V/30~55V	
	Current setting range	0.15~3.0A（Programmable）	0.15~4.0A（Programmable）	0.15~6.0A（Programmable）	
	Min current	100mA（Dimming）			
	Current precision	±2%			
	Dimming	0~100%（Programmable）			
	Voltage of start dimming	10.0~17.0V(Lithium)	10.0~32.0V(Lithium)		
	Dimming percentage	1~20%（Programmable）			
System Parameters	Max tracking efficiency	>99.9%			
	Max charge conversion	97.50%			
	Max LED driver efficiency	96%			
	Communication mode	Infrared/2.4G/RS485			
	Induction mode	Infrared Human Sensing/Microwave Sensing			
	Self consumption	6~25mA			
	Ambient temperature	-35~+60℃			
	Ambient humidity	0~100%RH			
	Protection degree	IP67			
	Max Altitude	4000m			

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BUILT TO LAST

A top-quality streetlight fixture built to withstand all conditions, and to cope with physical impact and vibration.
One-piece die-cast aluminum housing with integral mounting for strength and durability.

Optics:
Optical systems for outdoor luminaires must be designed to satisfy several criteria in terms of luminaire performance. With a variety of light distributions, Aria series light engine features best in class optical performances. It is designed for convenience and economics, achieving wide column spacing, excellent uniformity plus no waste or obtrusive light.

Tool Free:
Tool free design, the back of the lamp can be opened by hand, which is easy to repair, installation and replacement.




Installation:
Easy to install without buying cables and rectifiers, directly on pole with an adjustable spigot 0°~90°.

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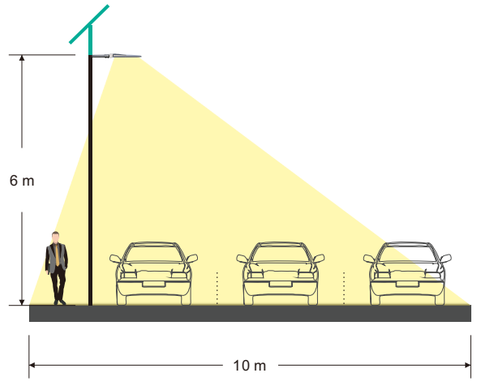
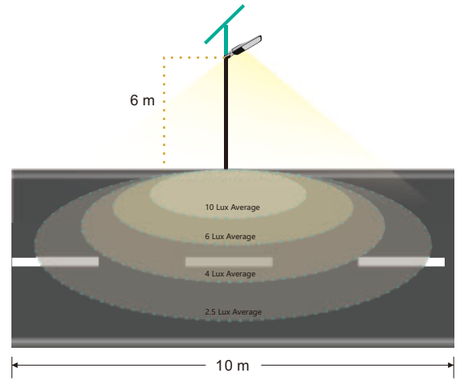
LIGHT DISTRIBUTION

E-Lite in development with Lumileds have created a new LED lens that provides greater luminous uniformity and offers the ultimate in design flexibility. The beam pattern is perfect for lanes, pedestrian promenades, bicycle paths as well as minor roads and car parks. As an added service, E-Lite also has its own internal lighting design team that use the latest Lighting Simulation software for projects requiring calculation of lighting levels and photo-metricreports. This will ensure that the correct quantity of fittings, pole heights and spacings are offered for our customers specific needs.





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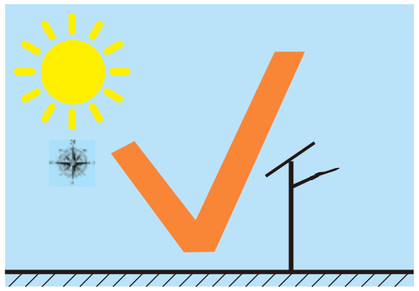
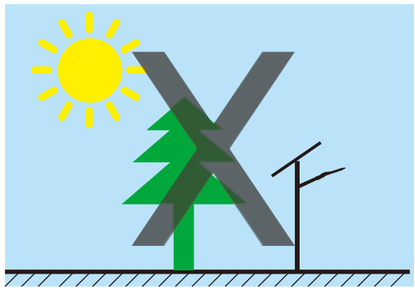
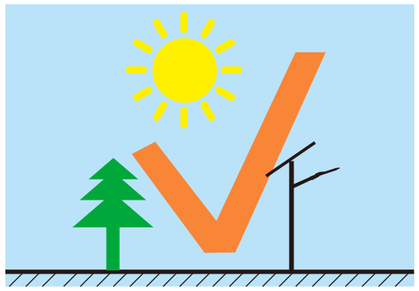
INSTALLATION



The solar panel can be adjusted to the best angle where it is able to absorb maximum sunshine. The most optimum direction to face the solar panel is somewhere between south and west. It is at this location that the panel will receive the maximum sunlight throughout the day.





The solar panel must not be installed in a shaded or part shaded location and never indoors.

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A FUTURE PROOF SOLUTION

Smart City

iNET™ Intelligent Lighting Monitor & Control System is a cloud based wireless smart system designated for lighting management.

With gateways + control node., iNET™ System monitors lights performance status, collects operation data, controls lights on/off or dimming, and sends alarm in case of fault detected.

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System & Hardwares

Automatic Light On/Off & Dimming Control
- By time setting
- On/off or dimming with motion sensor detection
- On/off or dimming with photocell detection

Accurate Operation & Fault Monitor
- Real-time monitor on each light working status
- Accurate report on fault dectected
- Provide location of fault, no patrol required
- Collect each light operation data, such as voltage, current, power consumption

Extra I/O Ports for Sensor Expandability
- Environment Monitor
- Traffic Monitor
- Security Surveillance
- Seismic Activities Monitor

Reliable Mesh Network
- Self proprietary wireless control node
- Reliable node to node, gateway to node communication
- Up to 1000 nodes per network
- Max. network diameter 2000m

Easy-to-use Platform
- Easy monitor on each and all lights status
- Support lighting policy remote set-up
- Cloud server accessible from computer or hand held device

ORDERING INFORMATION

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EL – STOM – XX

STOM - Omni Pro Series Die cast Street Light with split solar panel

Power
- 01 - 20W
- 02 - 30W
- 03 - 40W
- 04 - 50W
- 05 - 60W
- 06 - 80W
- 07 - 90W
- 08 - 100W
- 09 - 120W
- 10 - 150W
- 11 - 180W
- 12 - 200W

Dimmability
- 02 - Dimmable

LEDS
- 04 - Philips Lumileds

CCT
- 02 - 2500-3500K
- 04 - 3500-4500K
- 06 - 4500-5500K
- 09 - 5500-6500K

Opticals
- 08 - 60×100°（TYPE Ⅰ-VS）
- 10 - 70×135°（TYPE Ⅱ-S）
- 12 - 110°（TYPE Ⅴ-VS）
- 13 - 150°（TYPE Ⅴ-VS）
- 38 - 75×150°（TYPEⅢ-M）
- 46 - 80×150°（TYPEⅢ-S）
- 51-65×155°（Type Ⅱ-M）
- 52-65×145°（TypeIV-S）

Battery
- 01 - Standard

Charge Controller
- 02 - Solar Controller - B
- 03 - Solar Controller - C

IoT
- 01 - None
- 02 - IoT
- 03 - IoT + Geo Tracking

Mounting
- 07 - Slip Fitter

IP Rating
- 04 - IP66

Charger
- 01 - Nonavaliable
- 02 - DC Charger

Fixture Color
- 04 - RAL7045 Gray

E-Lite Semiconductor Co., Ltd.
Headquarter & Factory
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