

A row of solar streetlights is installed along a dirt road in a desert landscape. The lights are tall, silver poles with a solar panel mounted on top and a light fixture extending from the side. The solar panels are tilted towards the sun. The background shows a clear blue sky and a dry, hilly terrain.

ARIA

SERIES

SOLAR

Street
Light

E-LITE semicon



LIGHTING THE WAY

SOLAR meets LEDs

The sunshine is a sustainable, reliable, non-polluting source of power. Concerns over global climatic change, local air pollution and resource scarcity make photovoltaic (PV) an increasingly attractive energy supply technology. Using solar energy with LEDs instead of HID/MH/CFL provides a very efficient solution in lighting industry.

Solar powered outdoor lighting products are ideal for lighting the area in remote locations where the electricity is unavailable or erratic. Even in urban areas, these find great usage to reduce dependency on conventional power and contribute towards green energy. Reliable and long life makes this solution effective in fulfilling our present and future lighting requirements.

E-LITE semicon / [Hello@elitesemicon.com](mailto>Hello@elitesemicon.com) / www.elitesemicon.com

KEY FEATURES



System Light Efficacy 170~175LPW with high performance LED chips.



Highly efficient monocrystalline silicon photovoltaic panels.



Solar powered-No need for any other power supply or electrical cabling.



Easy to Install and Maintain.



Automatic dusk to dawn operation(or timer options).



Five years warranty.



APPLICATIONS

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



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.

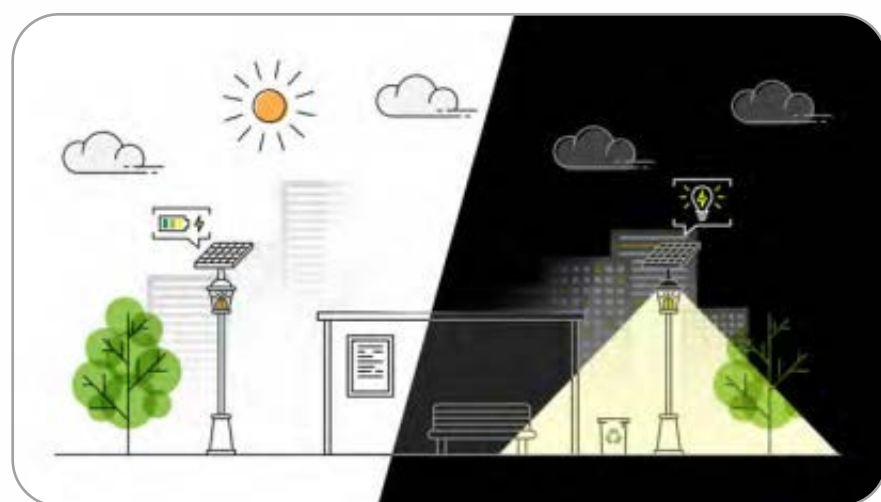


Microprocessor managed algorithms autonomously determine sunrise and sunset



DAYTIME OPERATION

The solar panels absorb the sunlight energy, then transmit it to electricity and store it in the battery during the day. Generally, solar panels convert average 20% of sunlight energy into electrical energy



NIGHT TIME OPERATION

At night, the stored electrical energy power the light under the PIR sensor working mode: Keep 10% power lighting when nobody around, 100% full power lighting when people or car coming. The light turns off when the sun rise up, and the day/night operation cycle starts again.





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 $0^{\circ} \sim 90^{\circ}$.



PERFORMANCE



20W~70W



170lm/W~175lm/W



Philips Lumileds



One consecutive rainy day



PIR



≥70



4500~5500K(2500~5500K optional)



L70>100,000hours



70x140° / 70x150° / 95x150° / 85x155°



IP66



IK09



Operating Temperature:-45°C to +45°C (-49°F to 113°F)
Storing Temperature:-45°C to +80°C (-49°F to 176°F)

SPECIFICATIONS

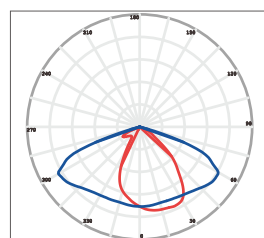
Part#	Power	Solar Panel	Battery	Efficacy (IES)	Total Lumen	Product Dimensions
EO-AST-20	20W	20W/18V	18AH/12.8V	175 lm/W	3,500lm	620x272x108mm
EO-AST-40	40W	30W/18V	36AH/12.8V	170 lm/W	6,800lm	720x271x108mm
EO-AST-50	50W	50W/18V	42AH/12.8V	170 lm/W	8,500lm	750x333x115mm
EO-AST-70	70W	80W/36V	30AH/25.6V	175 lm/W	12,250lm	850x333x115mm

Index Parameter Comparison								
E-Lite Solar Street Light				VS	General Solar Street Light			
Power	Efficacy	Total Lumen	Housing Dimintions		Power	Efficacy	Total Lumen	Housing Dimintions
20W	175Lm/W	3,500lm	620x272x108mm		30W	130Lm/W	3,900lm	520x200x100mm
40W	170Lm/W	6,800lm	720x271x108mm		50W	130Lm/W	6,500lm	520x200x100mm
50W	170Lm/W	8,500lm	750x333x115mm		60W	130Lm/W	7,800lm	520x200x100mm
70W	175Lm/W	12,250lm	850x333x115mm		90W	130Lm/W	11,700lm	620x272x108mm

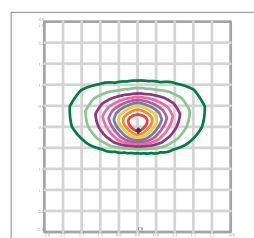


PHOTOMETRICS

70x140° (TYPE II-S)

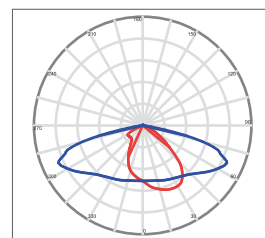


— 0.0~180.0
— 90.0~270.0

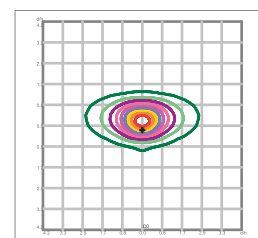


Mount Height(m): 6

70x150° (TYPE II-M)

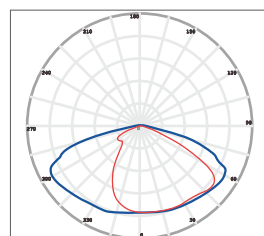


— 0.0~180.0
— 90.0~270.0

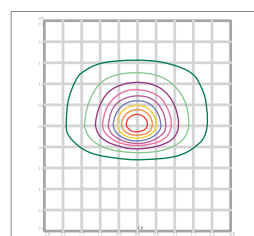


Mount Height(m): 8

95x150° (TYPE III-S)

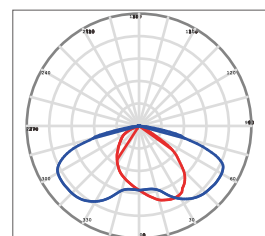


— 0.0~180.0
— 90.0~270.0

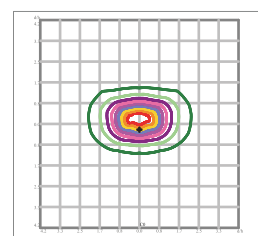


Mount Height(m): 6

85x155° (TYPE II-M)



— 0.0~180.0
— 90.0~270.0



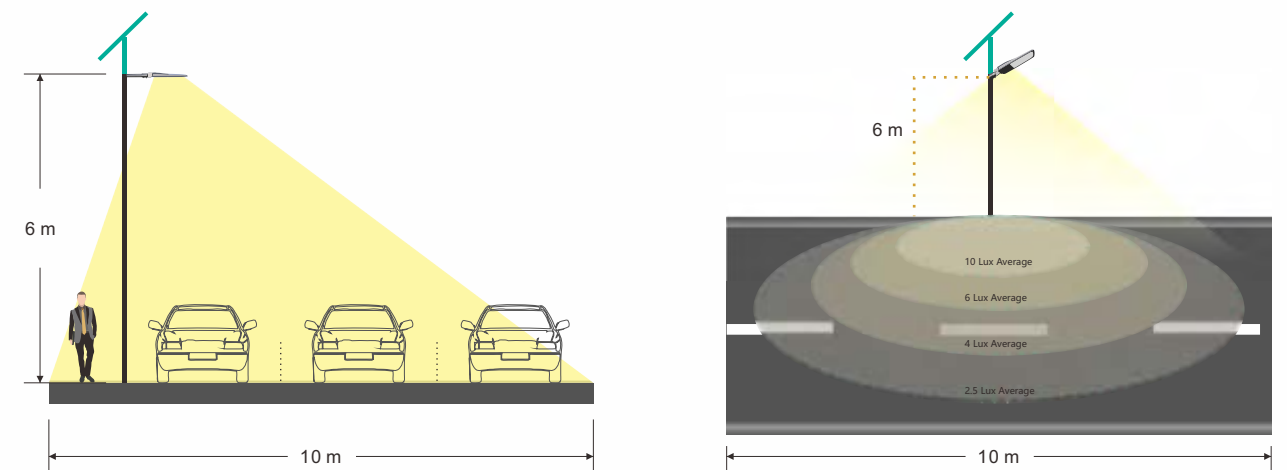
Mount Height(m): 6





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-metric reports. This will ensure that the correct quantity of fittings, pole heights and spacings are offered for our customers specific needs.

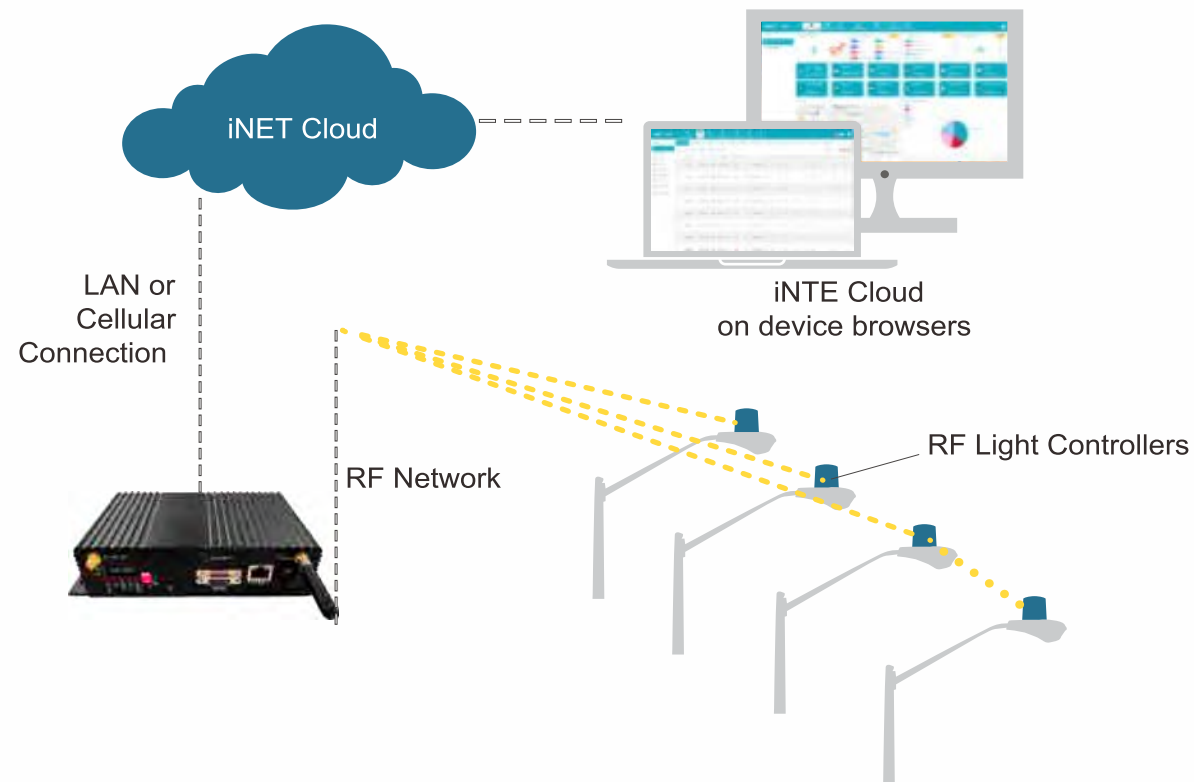


A FUTURE PROOF SOLUTION

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.



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 detected
- 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

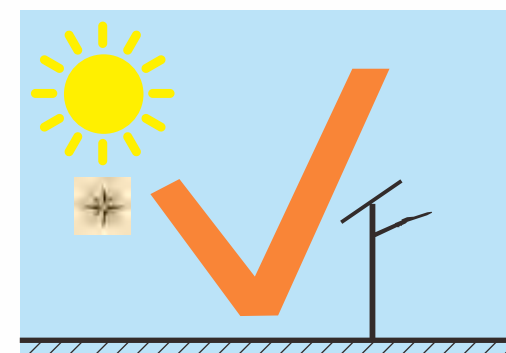


Easy-to-use Platform

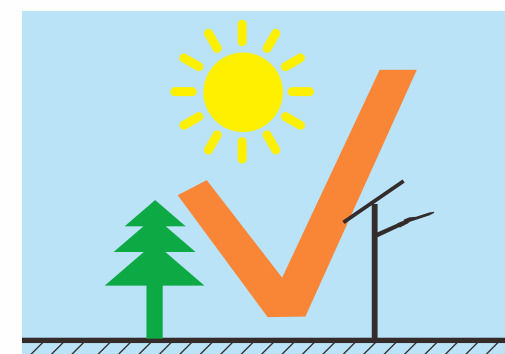
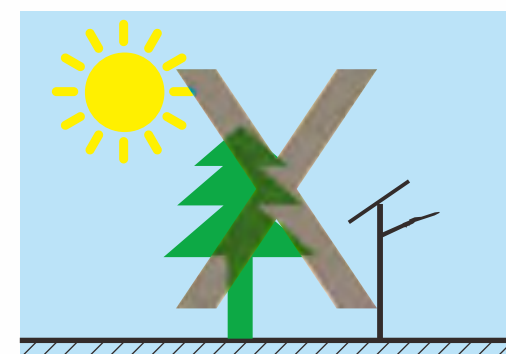
- Easy monitor on each and all lights status
- Support lighting policy remote set-up
- Cloud server accessible from computer or hand held device



INSTALLATION



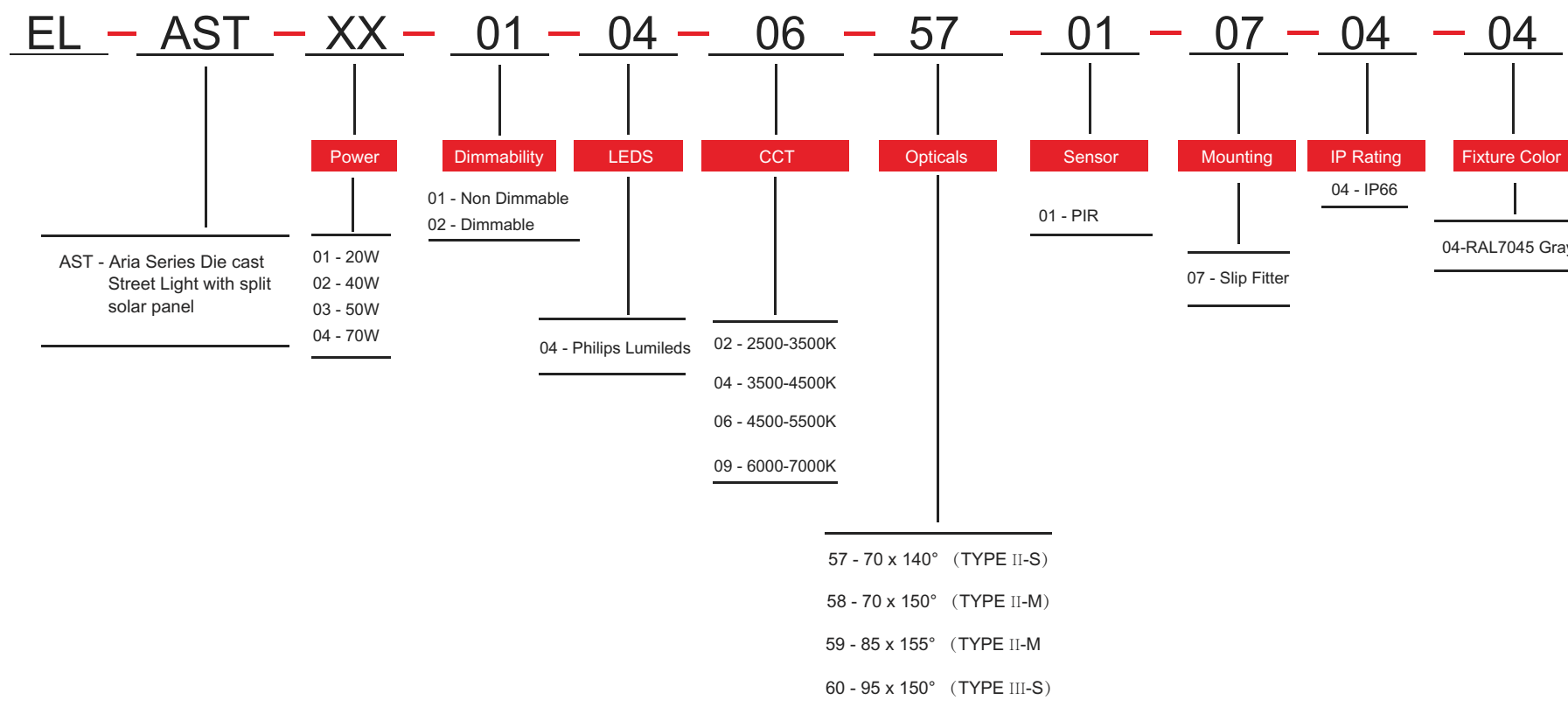
The solar panel can be adjusted to the best angle where it is able to absorb maximum sunshine. The most optimum direction to face the solar panel is somewhere between south and west. It is at this location that the panel will receive the maximum sunlight throughout the day.



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

ORDERING INFORMATION

E-LITE semicon



E-Lite Semiconductor Co., Ltd.
Headquarter & Factory
Website: <http://www.elitesemicon.com>