

LEADSUN

"The Leader In Solar Lighting Technology"



The worlds most intelligent solar powered lighting system

ALPHA



LIGHTING THE WAY

Built specifically for Australia's tough climate, the Alpha series is the world's most advanced and intelligent LED solar lighting system. Its clever design and attractive, robust construction incorporates the latest solar power technology, providing many years of outstanding performance and operational reliability.

ALPHA

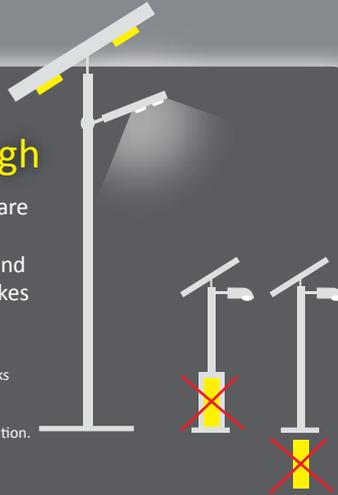
AE6



Technical Breakthrough

The lightweight lithium-ion batteries are conveniently located under the solar panel, making them easier to install and maintain*. The height of the pole makes the batteries tamper and theft proof.

*Other branded solar lights house lead acid battery packs underground that are quite heavy and cumbersome to manhandle in both the installation and replacement processes, they also have a vulnerability to water infiltration.



UNIQUE PROPERTIES

The Alpha uses LEADSUN's innovative, patented "All-In-One" system that integrates a highly efficient solar panel, compact Lithium-ion LifeP04 batteries and a smart power management system into a compact, easy to install product.

Importantly, the "All-In-One" design eliminates the need for external wiring to remote battery packs and does not require an electrical tradesman to set up. All wiring is simply done by IP67 wiring looms that interconnect the high output LED luminaire directly to the power management system without requiring tools.

WIDESPREAD APPLICATIONS

These include:

- Road Lighting
- Parks and Reserves
- Remote Areas & Bushland
- Pedestrian & Rail crossings
- Commercial & Industrial estates
- Jetties, Pontoons & Boat Ramps
- Security & Perimeter Lighting
- Bike & Pathways
- Mine sites



Technical Breakthrough

The ALPHA has been designed to withstand the harshest and most extreme environments Australia has to offer – from blistering heat to driving rain, hail and sub-zero temperatures.

LEADSUN's rugged construction is up to the challenge. Its internal components offer IP65 weather protection and its external metallic components are built with marine-grade aluminium and stainless steel fixings and supports.

The ALPHA series is also resistant to shock and vibration. The external security bolt fixings that attach the system's components to the column are not only extremely durable, but tamper and theft proof (a unique tool is needed to remove the fixings).

All LEADSUN's solar lighting systems are subject to a 168 hour neutral salt spray test to prove their effectiveness in marine-type conditions.



THE LEADSUN ADVANTAGE

LEADSUN capitalises on the most technically advanced LED lighting technologies that work seamlessly and systematically with LEADSUN's latest LED driver and power management system.

Our newly developed luminaire uses the latest LED technology from OSRAM that is highly efficient and powerful enough to meet the most demanding requirements while offering superior illumination, ideal for all pedestrian pathway lighting applications.

POWER MANAGEMENT

An important benefit of the ALPHA series is its ability to ensure consistent light output even when the batteries are approaching their minimum level.

LEADSUN's power management system continuously monitors and automatically regulates the light output taking into account changed battery conditions. For instance, if battery levels decrease to 30% of capacity, the light output can be programmed to dim to a lesser wattage or to only operate when the 'Smart eye' detects nearby motion.

LED & LIGHT MANAGEMENT

LEADSUN has adopted OSRAM's highly acclaimed OSOLON SSL LED's as part of its newly designed luminaire that offers high performance uniformity and an efficiency not seen before in LED technology, while maintaining a compact design. The ALPHA series is available in 20W, 30W and 40W outputs.

Life expectancy for the OSRAM LEDs is more than 50,000 hours, providing years of trouble-free operation.

BATTERIES & CHARGING UNIT

LEADSUN uses new-generation, high quality Lithium-ion Life P04 batteries manufactured to exacting standards for high power applications and longevity.

Key benefits include enhanced safety, strong thermal stability, tolerance to abuse, a high current rating and a 1500 cycle life (the highest available for this kind of battery). Lithium batteries are half the weight and size of lead acid and some other deep cycle batteries, take higher voltage under load and offering as much as 10 times the cycle life. Lithium batteries are also fully recyclable, making them the smart choice for our precious environment.

LEADSUN's batteries are charged for maximum efficiency using our integrated charging circuit that constantly monitors the state of the batteries to optimise the charging levels while protecting them against overload, over-charge, over-discharge and accidental short circuit. The batteries can operate in temperatures from -20 degrees to +60 degrees Celsius.

Technical Breakthrough

SMART EYE MOTION DETECTION
Powered by Panasonic



The ALPHA series has a built-in motion detection security feature that automatically regulates the LED light output from full brightness to a lower level depending upon the detection of movement around the light.

This fluctuation of lighting intensity preserves battery power and also serves to increase community security by deterring unsociable activity late at night and early in the morning where these lights are installed.

"Smart Eye" is a user-defined setting that can be configured to control the LED output in various modes.





Built specifically for Australia's tough climate, the ALPHA AE6 is the world's most advanced solar lighting system.

OPTIONS

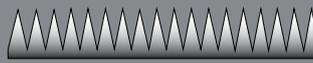
- EZYPOLE:** Leadsun offers the perfect solution for making the installation of our lighting system cost-effective and safer to carry-out without the need of any cranes or hoists to lift the poles. Our innovative poles are easy to install and can be lowered to ground level where the installation and maintenance of the lighting system can be easily and safely carried out. Please visit ezypole.com for more information.



Lowerable winch pole



- BIRDSPIKE:** Is an accessory that can be easily attached to the entire Alpha range, we use a semi transparent poly carbonate spike so it doesn't diminish the appearance of the unit. When installed, the bird spike prevents birds from perching on the top of the fitting and fouling on the solar panel which can decrease the solar efficiency of the system.

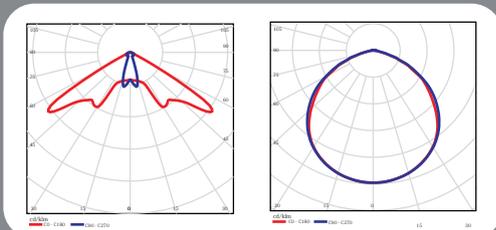


*suits all panels

- SUREFOOT:** Provides a quick and environmentally friendly solution to install all of Leadsun's solar lighting products. Typical concrete footing systems need a few days curing time before the poles and lights can be installed. The Surefoot system now allows full installation of the lighting system in normally under 2 hours, it can handle large bending moment loads of upto 700Kgs and load capacities that exceed 8.5 tonne. Please visit ezypole.com for more information.



- LIGHTHEADS:** Leadsun offers a combination of high quality LED heads to suit every type of application and available from a range of 10W to 40W outputs. Our light heads have multiple options that can produce a choice of lighting distributions including:



1 – OSRAM

2 – SAMSUNG

- 1 – 'OSRAM' symmetrical beam (narrow radiation pattern that is designed to maximize efficiency)
- 2 – 'SAMSUNG' Round beam (extremely efficient SMD LED and provides an excellent colour reproduction)

Leadsun's contemporary styled light heads can be easily mounted directly to any round post up to 90mm diameter, multiple light heads can also be connected to the pole offering widespread lighting distribution.

- AIR-STREAM:** Provides a breakthrough and valuable function in remotely controlling and monitoring power that is generated and consumed by the solar lighting system, it uses either a cellular or satellite internet connection and an affordable monthly data plan provided by LEADSUN. It can also transmit data and video information for industry specific applications via the use of external devices that can be interfaced via Ethernet connections. A selection of weather proof IP CCTV cameras can be used with the Air-stream system for surveillance purposes.

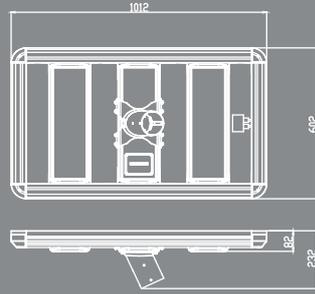


Air-stream provides:

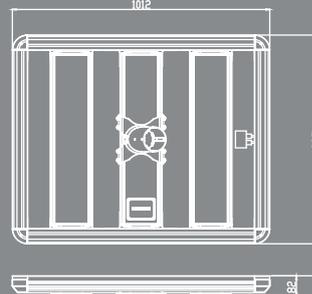
- Amp hours input (Solar to battery)
- Amp hours output (battery to lamp)
- Maximum battery output
- Minimum battery output
- System status (on/off)
- System override (turn lamp on/off)
- IP interface for CCTV camera

Solar Panel & Battery Module

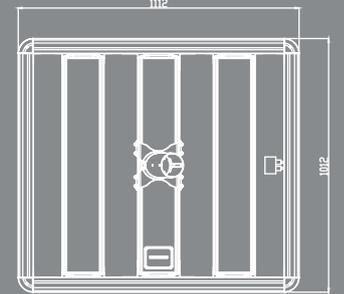
Model No.	AE6S80V12B32	AE6S80V12B42	AE6S120V24B26	AE6S120V24B26	AE6S160V24B42	AE6S160V24B52
Monocrystalline Silicon PV	80Wp	80Wp	120Wp	120Wp	160Wp	160Wp
Lithium LiFePO4 battery module	12.8V 32AH	12.8 42AH	25.6V 26AH	25.6V 42AH	25.6V 42AH	25.6V 52AH
Output voltage	12VDC	12VDC	24VDC	24VDC	24VDC	24VDC
Net weight	19.5kg	22.5kg	27.5kg	32kg	38.5kg	41.5kg
Dimension (mm)	1012 x 602 x 86mm		1012 x 827 x 86mm		1112 x 1012 x 86mm	



AE6S80V12B32 / AE6S80V12B42



AE6S120V24B26 / AE6S120V24B42



AE6S160V24B42 / AE6S160V24B52

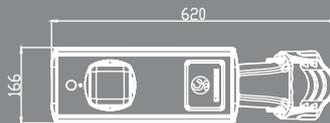
Over load / Over charge Protection
Working Charging temp. °C
temperature Discharging temp. °C
Storage temperature °C
Joint bracket tilt angles
IP Rating

Yes
0°C~+60°C
-20°C~+60°C
-20°C~+60°C
25° (Standard) / 40°
IP65

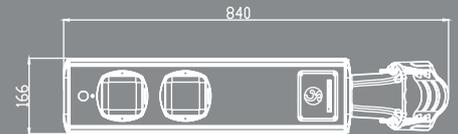
LED Light

Model No.	LSL12M-12	LSL12-12	LSL16M-12	LSL16-12	LSL20M-12	LSL20-12	LSL30M-24	LSL30-24	LSL40M-24
LED Light Chip	Osram	Samsung	Osram	Samsung	Osram	Samsung	Osram	Samsung	Osram
LED MAX. Output	12W, DC 12V		16W, DC 12V		20W, DC 12V		30W, DC 24V		40W, DC24V
Recommended installation height			4 to 6m				5 to 7m		5 to 8m
Recommended installation distance			18m to 22m				22m to 25m		25m to 28m
Net weight			3.5kg				4.5kg		
Dimension (mm)			620 x 166 x 172mm				840 x 166 x 172mm		

LED Specification	SAMSUNG LED	OSRAM LED
Light Distribution	Round Beam	Bat Wing
Light Efficiency	100 lm/W	80 lm/W
CRI	80	70
Colour Temp	5000 K	
IP Rating	IP 65	



16W/20W



30W/40W



Distributed By

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Lighting Column

Specifications

Thickness of light pole	≥2.5mm
Pole top dimension range	75 to 90mm
Pole height range	4 to 8m

*LEADSUN reserves the right to amend and improve the product appearance, construction and function without and prior notification.



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