

LEADSUN



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LEADSUN

Limitless Light. Beyond the Grid



Product Catalog

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About Leadsun

Unrivalled innovation and proven experience

Since 2005, Leadsun has advanced solar lighting through a commitment to practical engineering, relentless refinement and tough real-world testing. Born from the early innovation of Enson Meng and Matt Pollard, Leadsun created the world's first All-In-One solar streetlight—technology that has since evolved from promising to proven.

Refined in Australia's harsh conditions and further enhanced through local design capability in California, our systems blend next-generation thinking with dependable, field-tested performance. This fusion of innovation and maturity delivers rugged, intelligent solutions built to last without limits.

Trusted, Established and Ready for Scale

After years of global deployment and validation, Leadsun entered the U.S. in 2016 with a proven product line suited to America's growing need for resilient, grid-independent lighting. Nearly 15,000 systems later, our SMART solar technology has earned the trust of cities, developers and utilities nationwide—delivering reliable light where trenching, copper theft, and grid delays hold communities back.

With headquarters in Ontario, California, and an Operations Center in Tampa Bay, Florida, we combine international expertise with local design support, local service, and nationwide project capability. Leadsun stands today as a stable, credible, next-generation lighting partner built for long-term confidence and scalable deployment.

Lighting a Brighter, Limitless Future

Our mission is to help communities build safer, cleaner, and more resilient public spaces using the sun's limitless energy. By replacing grid-dependent lighting with proven off-grid infrastructure, we reduce emissions, eliminate costly trenching, and deliver reliable lighting even when the grid cannot.

Through our long-standing partnership with solarbuddy.org, we extend this impact globally—providing safe, dependable light to children experiencing Energy Poverty. At Leadsun, light is the enduring spark of a better, more connected future.



40+ Patented Products



20+ Years in Business



500,000 World-wide Deployments



15,000+ US Deployments



Leadsun USA

CALIFORNIA

Leadsun USA

FLORIDA

Leadsun ASIA

HONG KONG

Leadsun Australia

MELBOURNE

LEADSUN

Limitless Light

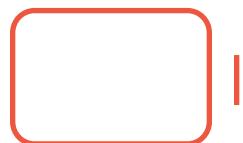
For nearly two decades, Leadsun has earned its reputation the hard way—through systems that survive where others fail. Since our founding in 2005, our technology has been proven in some of the world’s toughest environments, from the scorching heat of the Australian outback to the dry desert extremes of Palm Springs, and even back-to-back hurricanes across Florida.

The image to the right represents an early installation, set in remote Australian regions where temperatures, dust, wildlife and isolation pushed every component to its limits. These challenging sites became our proving grounds, shaping the rugged reliability that now defines every Leadsun system.

Today, that same toughness is trusted by cities and communities across the USA. Wind-tested to withstand hurricane-level gusts exceeding 150 mph, engineered for extreme heat stability, and supported by local design expertise in California, our solutions deliver peace of mind long after installation.

Leadsun has been built through years of relentless refinement, real-world performance, and a commitment to stand behind every light we put into the world.





Product Feature

Advanced Battery Management System

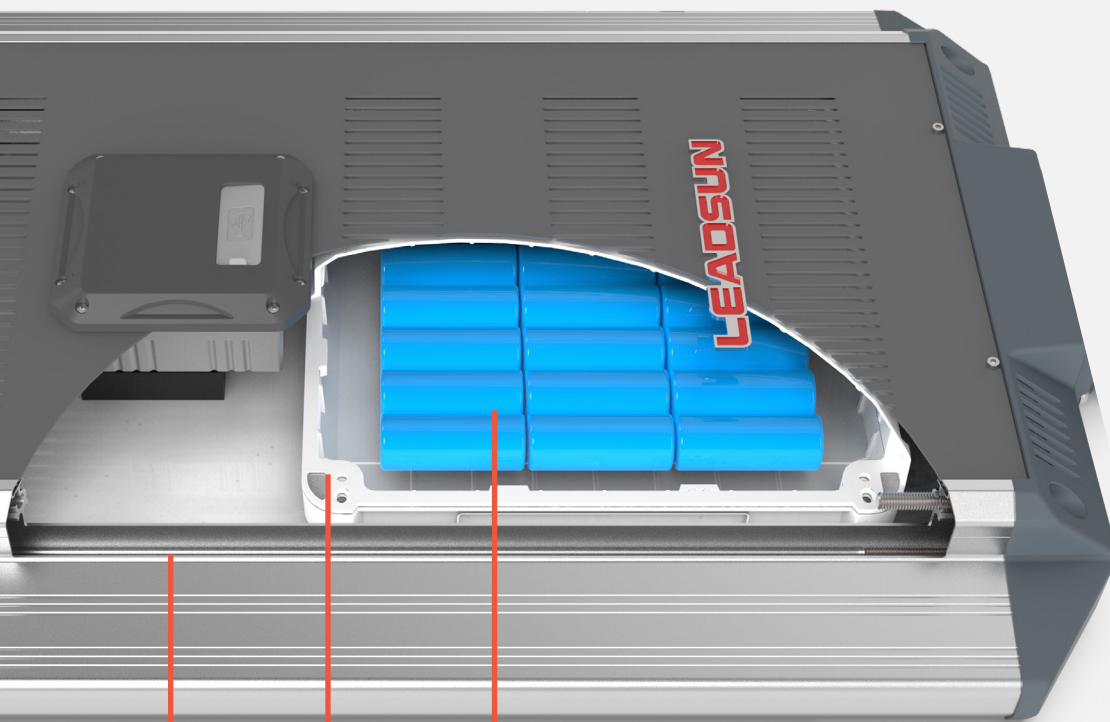
Enduring by design. Ingeniously balanced.

At the core of every Leadsun solar lighting system is our patented dual-lithium battery architecture.

Matured over nearly **20 years of development**, this next-generation system intelligently balances two ultra-high-capacity LiFePO₄ batteries, regulating charge and discharge to dramatically extend lifespan and ensure consistent, stable performance night after night.

Unlike conventional single-battery setups, our encapsulated dual-pack design

isolates thermal effects, maximizes usable capacity, and helps each battery share the workload — meaning lower stress, smoother cycling, and 10-year-plus real-world performance even under demanding environmental conditions. This is the hidden engineering that makes Leadsun systems last longer, perform better, and deliver unmatched reliability in solar lighting.



**Internal Dual
Battery System**

IP67 Rated Sealed

**Aluminum Thermal
Management Housing**

**Inside our defining
technology.**

Our patented dual-lithium system, refined over 20 years, is the quiet engine behind our world-leading reliability.



**Stable, balanced
performance**

Patented dual-battery design intelligently manages load for longer life and predictable nightly runtime.



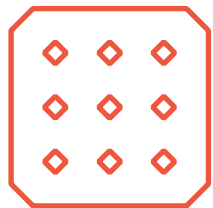
**Over 4,000 cycles at 80%
DoD (depth of discharge)**

Engineered for deep cycling without degradation, supporting long-term off-grid resilience.



**Wide operating
temperature range**

Designed to perform in extreme heat, cold, and fluctuating climates anywhere in the world.



Product Feature

Monocrystalline Solar Module

Ultra-Efficient. Engineered In-House.

Generating more energy than conventional modules, our in-house-developed monocrystalline solar module delivers exceptional conversion efficiency and long-term reliability.

Designed specifically for our systems, it captures maximum power from a compact footprint, ensuring strong energy harvest even in challenging sites and seasons.

Bifacial High-Yield Design

Our AE1 and AE6 series advanced bifacial cell design captures light from both the front and rear surfaces, boosting solar charge efficiency by more than 10%—even in ambient and reflected light conditions. This means higher daily energy yield, faster battery recovery, and more dependable performance year-round.



High Energy Yield

Optimized cell layout, low-loss wiring, and bifacial capture combine to deliver outstanding kWh output in a minimal panel area.



Over 22% Conversion Efficiency

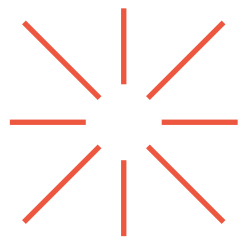
Premium monocrystalline cells and in-house engineering ensure consistently high efficiency across real-world operating temperatures.



Over 25-Year Lifespan

Built with durable materials, UV-stable encapsulation, and proven PV construction, our modules provide a typical **20+ year** optimal performance life, supporting system reliability for decades.





Product Feature

Brilliant LED Module

Purpose-built for Precision Lighting.

Leadsun's advanced LED module combines premium Osram, Philips, and Cree chips with precision-engineered optics to deliver exceptional performance and long-term reliability.

Certified by U.S. laboratories at >190 lm/W, our LED engine produces powerful, uniform illumination while maintaining outstanding energy efficiency.

A durable UV-resistant polycarbonate lens and IK08 impact rating ensure every module withstands harsh outdoor environments including extreme heat, dust, rain, and corrosive coastal conditions.

DarkSky Approved Design

Available in 3000K with engineered cut-off optics to dramatically reduce glare and sky-glow. Using the Freedom-model fixture, Leadsun supports DarkSky approved lighting in communities seeking to protect nighttime environments.

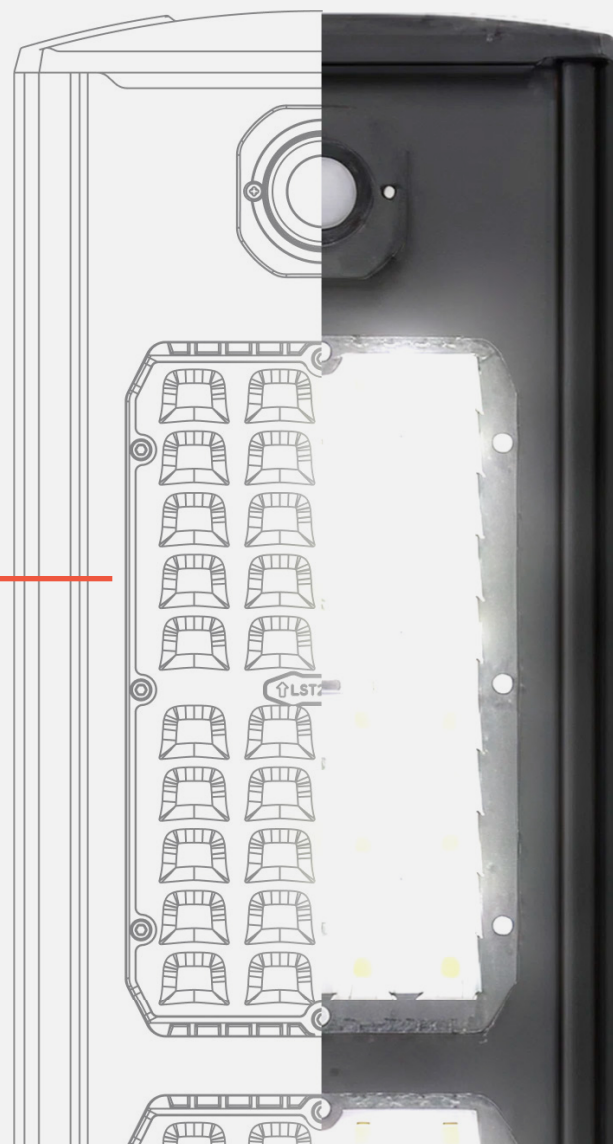
High- Performance Optics & Light Control

Our refined cut-off optics minimize glare, enhance visual comfort, and improve uniformity across pathways, parks, roadways, and residential areas.

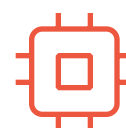
We offer four professional IES distributions, giving engineers and designers the flexibility to match light patterns to real-world applications:

- Type II – Short (T2-S)
- Type II – Long (T2-L)
- Type III (T3)
- Type IV (T4)

These beam patterns provide precise photometric outcomes, improved efficiency, and safe light placement without unnecessary spill.



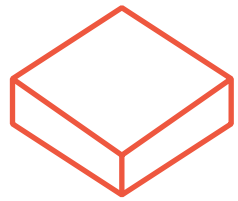
Actual luminous efficacy
>190 lm/W



Premium outdoor-rated
Osram & Philips LED chips



Lab-certified 100,000 hrs
(TM21)



Product Feature

Strong Modular Structure

Engineered tough. Designed smart.
Installed in minutes.

Leadsun systems are built around a robust, intelligently engineered modular structure designed for strength, simplicity, and long-term reliability.

Our modular design components come **pre-connected and factory aligned**, reducing installation time dramatically and ensuring consistent system performance straight out of the box. This structural efficiency also helps minimize EPA (Effective Projected Area), reducing wind drag and lowering mechanical stress on poles and brackets.

Refined through years of real-world deployment, this structure is engineered to withstand **150 mph hurricane-level wind loads**, resist corrosion, and maintain optimal cooling and durability across extreme temperatures—from blistering desert heat to storm-prone coastal climates.



Robust, compact, and ready to install

A rigid, reinforced structure provides exceptional strength while keeping the overall unit lightweight and easy to handle.



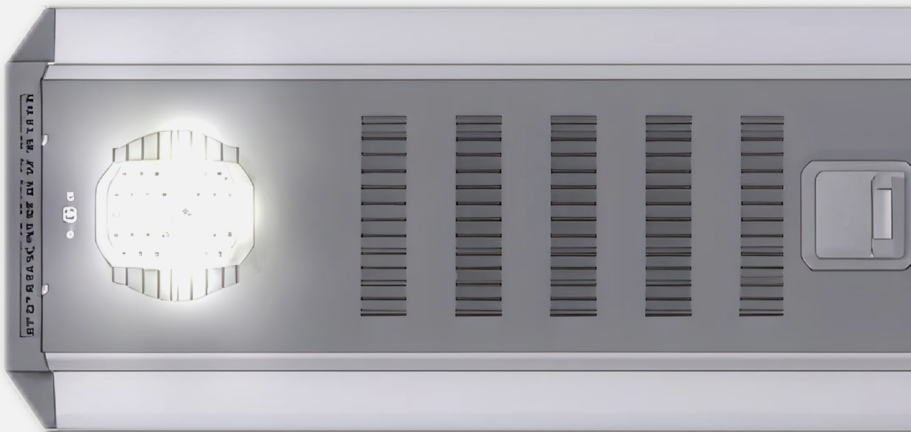
Pre-connected modular components

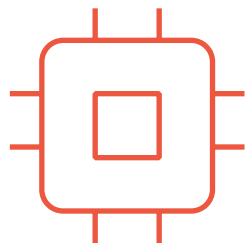
Controllers, batteries, and wiring harnesses are integrated at the factory, making on-site installation simple, fast, and error-free.



Low EPA, aerodynamic shape

A sleek, compact form reduces wind load, lowers friction during storms, and enhances long-term safety and stability.





Product Feature

Smart Controller

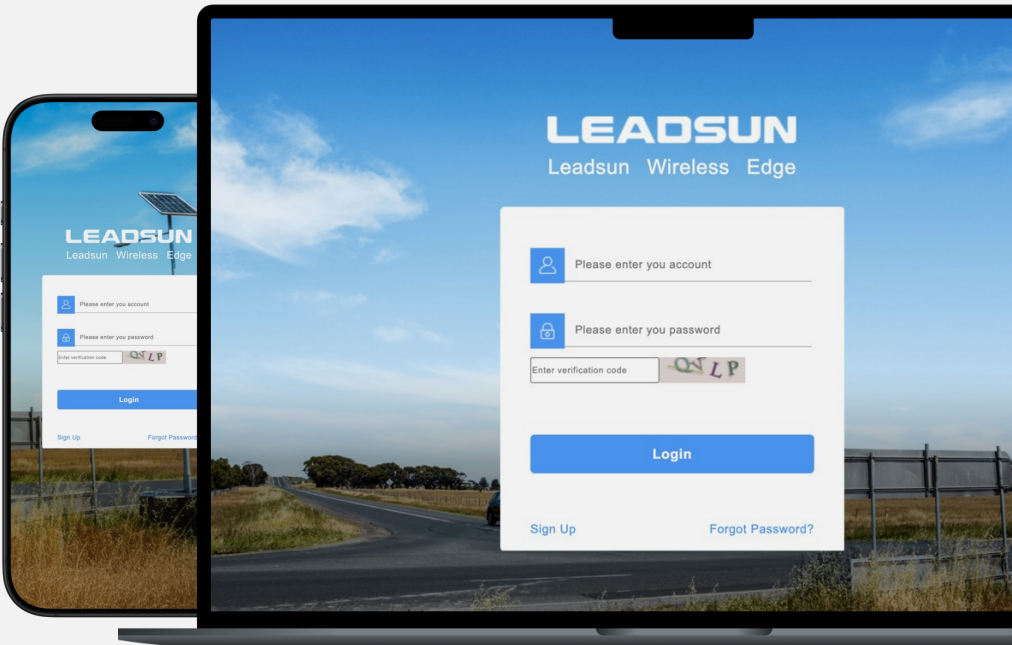
Engineered for Total System Control.

Leadsun's SMART Controller is the result of years of meticulous R&D, bringing together all critical system functions into a single, highly efficient control platform. At its core, the controller seamlessly integrates MPPT solar charging, high-performance LED driving, and adaptive autonomous lighting control, enabling each light to operate at peak efficiency in any environment.

Its intelligent dimming profiles and real-time adaptive logic maximize battery life and nightly performance, while optional 12VDC auxiliary outputs allow the addition of low-power IoT devices for smart-city applications such as sensors, cameras, and environmental monitors.

Every Leadsun system also includes built-in EDGE wireless hardware, enabling up to 100+ lights to connect through a single gateway. This secure network provides remote monitoring, configuration, GPS smart mapping, and real-time status updates—accessible anywhere in the world through the Leadsun mobile app or cloud-based web platform.

Realtime status monitoring



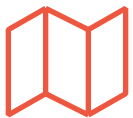
Program Mode Configuration

Customised brightness, dimming curves, active hours, and adaptive profiles.



Status Display

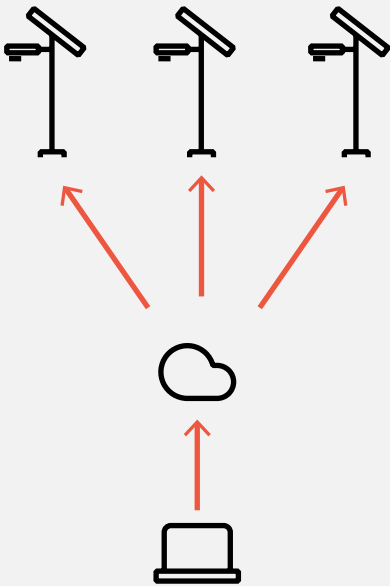
View battery level, solar input, LED output, temperature, alerts, and real-time performance.

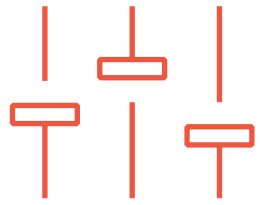


GPS Mapping

Precise asset location, status grouping, and system-wide visibility at a glance.

Access controls anywhere





Product Feature

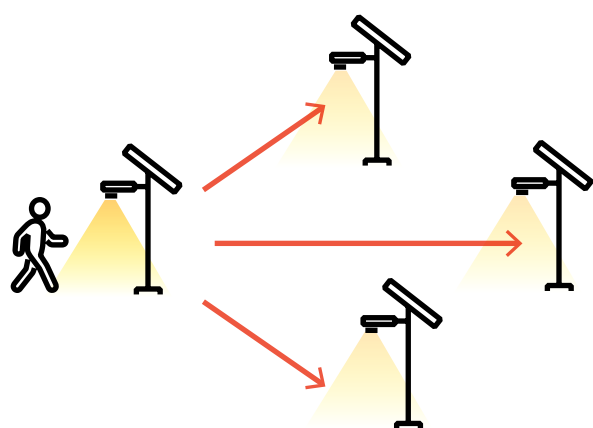
Intelligent Lighting

Smart Eye Controller & Adaptive Sensing:
Intelligence that moves with you

Leadsun's SMART Controller works hand-in-hand with our next-generation motion-sensing technologies to maximize energy efficiency, enhance safety, and deliver a new level of intelligent off-grid lighting behaviour.

Our adaptive sensing platform SMART Eye, is available in two configurations:

DISS Dynamic Intelligent Sensing System

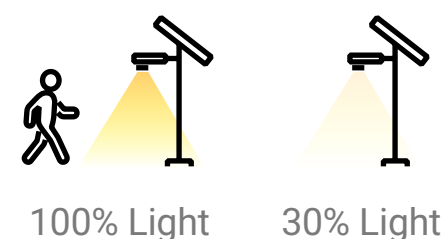


Our latest innovation: a breakthrough in multi-light, multi-directional sensing. Using advanced wireless coordination, DISS enables a single light's motion detection to automatically trigger a surrounding cluster of nearby lights — up to 250 ft away. This creates a dynamic “halo” of light around pedestrians, cyclists, or vehicles, illuminating their path before they even reach the next fixture.

- Instant group-response lighting
- Increased safety & visibility
- No need to walk directly under each light to trigger it
- Ideal for long trails, wide parks, remote walkways, and high-activity public spaces

PIR Independent Motion Sensing Technology

A highly responsive PIR sensor built into each light autonomously detects occupancy and adjusts brightness instantly. Lamps dim during low-activity periods to conserve power, then brighten the moment movement is detected — ensuring comfort, safety, and extended nightly performance.



Product Map





AE1

All-in-One

Compact. Integrated. Ready to Install.

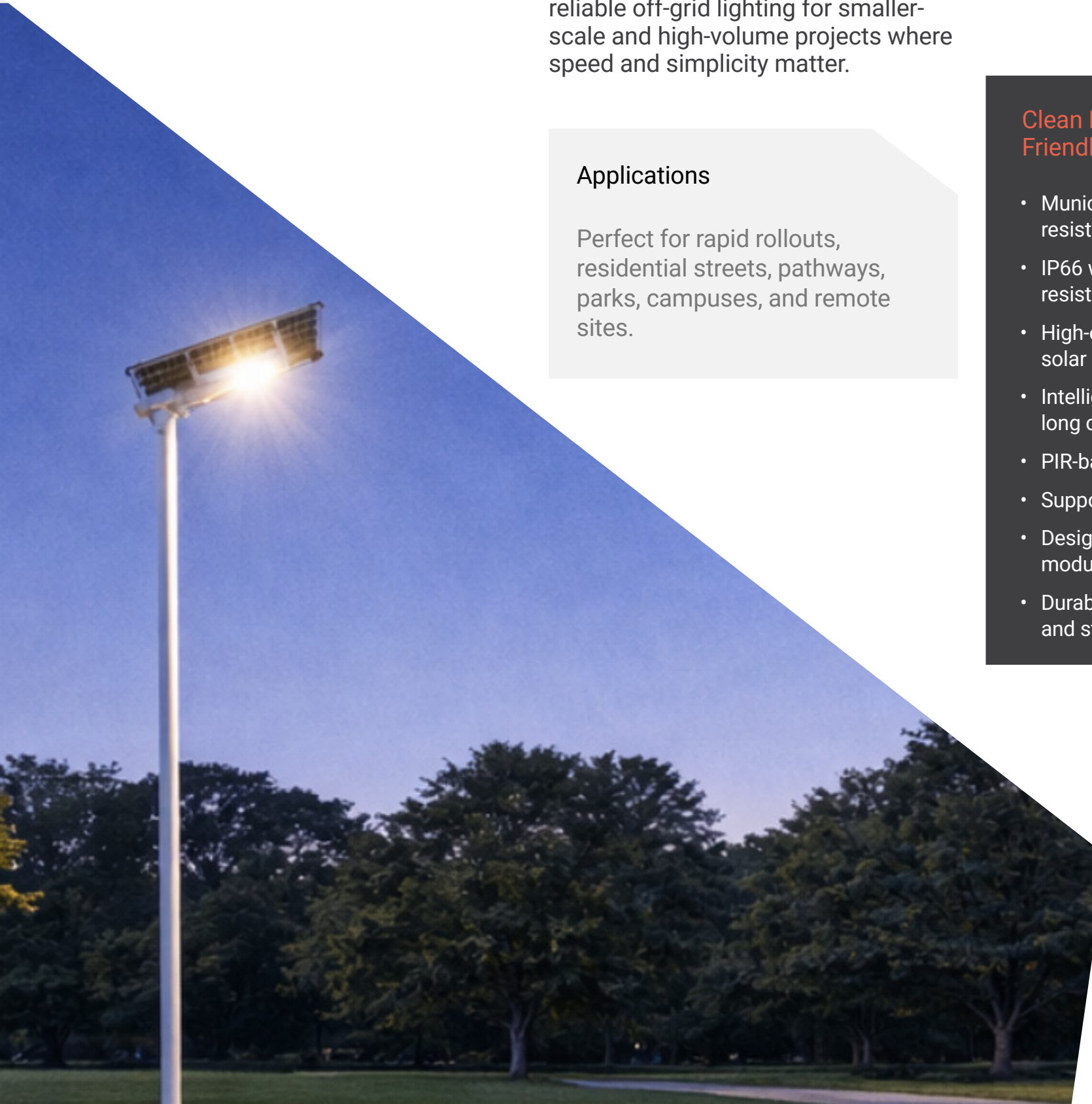
The AE1 All-In-One combines the solar module, battery, controller, and LED engine into a single, compact housing. Designed for fast, straightforward installation, it delivers reliable off-grid lighting for smaller-scale and high-volume projects where speed and simplicity matter.

Applications

Perfect for rapid rollouts, residential streets, pathways, parks, campuses, and remote sites.

Clean Design, Contractor-Friendly

- Municipality-grade corrosion-resistant materials
- IP66 waterproof + IK08 impact resistance
- High-efficiency monocrystalline solar modules
- Intelligent battery protection and long cycle life
- PIR-based adaptive lighting
- Supports 12–26 ft pole heights
- Designed for 60–100W solar modules + 10–40W LED engines
- Durable performance in high-heat and storm-prone climates





Long-Life Battery

High-cycle LiFePO₄ battery



Bi-Facial Solar

Boosting energy generation by 10–15%



Premium LEDs

precision optics with T3 distribution



Model Number		AE1 ALL IN ONE X4DN20
POWER OF PV MODULE (W)		60
LITHIUM BATTERY CAPACITY (WH)		308
NET WEIGHT OF PRODUCT (LBS)		28.7
DIMENSION OF PRODUCT (IN)		40(L) × 17.2(W) × 5(H)
Light Parameters		
LIGHT OUTPUT (W)		20
COLOR TEMPERATURE (K)		3000/4000/5000
TYPICAL LUMINOUS FLUX (LM)		3800
Mounting Recommendation		
TOP OF POLE OR TENON OD (IN)		2.17-2.36
INSTALLATION HEIGHT (FT)		13.1-23
INSTALLATION DISTANCE (FT)		49.2-82

AE1

All-in-Two

Flexible Configuration & Optimized Solar Positioning

The AE1 All-In-Two separates the solar module from the LED luminaire, allowing installers to optimize solar orientation while positioning the light exactly where it's needed. This split design improves performance in shaded or challenging locations while maintaining a clean, professional installation.

Applications

Recommended for sites requiring precise light placement, including streetscapes, car parks, campuses, and pathways.

Clean Design, Contractor-Friendly

- Municipality-grade corrosion-resistant materials
- IP66 waterproof + IK08 impact resistance
- High-efficiency monocrystalline solar modules
- Intelligent battery protection and long cycle life
- PIR-based adaptive lighting
- Supports 12–26 ft pole heights
- Designed for 60–100W solar modules + 10–40W LED engines
- Durable performance in high-heat and storm-prone climates





Long-Life Battery

High-cycle LiFePO₄ battery



Bi-Facial Solar

Boosting energy generation by 10–15%



Premium LEDs

precision optics with T3 optics distribution

Model Number	AE1 -ALL IN TWO X4S100P-SL40
POWER OF PV MODULE (W)	100
LITHIUM BATTERY CAPACITY (WH)	410
NET WEIGHT OF PRODUCT (LBS)	41.9
DIMENSION OF PRODUCT (IN.)	42.7(L) × 21.8(W) × 12.4(H)
Light Parameters	
LIGHT OUTPUT (W)	40
COLOR TEMPERATURE (K)	3000/4000/5000
TYPICAL LUMINOUS FLUX (LM)	7600
Mounting Recommendation	
TOP OF POLE OR TENON OD (IN.)	2.56-2.76
INSTALLATION HEIGHT (FT)	19.7-26.2
INSTALLATION DISTANCE (FT)	82-114.8



AE3

All-in-One

Compact, Integrated, Ready to Install

The AE3 All-In-One model combines the solar module, battery, controller, LED engine, and PIR sensor into a single, sleek housing. Perfect for quick installations and smaller-scale infrastructure projects.

Applications

Perfect for rapid rollouts, remote sites, and high-volume deployments.

Platform Advantages

- Municipality-grade corrosion-resistant materials
- IP66 waterproof + IK08 impact resistance
- High-efficiency monocrystalline solar modules
- Intelligent battery protection and long cycle life
- PIR-based adaptive lighting
- Supports 12–26 ft pole heights
- Designed for 10–40W LED performance
- Durable performance in high-heat and storm-prone climates





190 lm/W LED

IES T2-S, T2-L, T3 distributions



Fully integrated
Solar engine



615Wh Battery

Long-life LiFePO₄ batteries



Model Number	AE3 CS6020N	AE3 CS9030Q	AE3 CS9040R
POWER OF PV MODULE (W)	60	90	90
LITHIUM BATTERY CAPACITY (WH)	308	512	615
NET WEIGHT OF PRODUCT (LBS)	32	43	44.5
DIMENSION OF PRODUCT (IN)	42.5(L) × 17.3(W) × 4.0(H)	56.0(L) × 17.3(W) × 4.0(H)	56.0(L) × 17.3(W) × 4.0(H)
Light Parameters			
LIGHT OUTPUT (W)	20	30	40
COLOR TEMPERATURE (K)	3000 / 4000 / 5000 (ALL MODELS)		
TYPICAL LUMINOUS FLUX (LM)	3800	5700	7600
Mounting Recommendation			
TOP OF POLE OR TENON OD (IN)	2.75-3 (ALL MODELS)		
INSTALLATION HEIGHT (FT)	13-23	20-26	20-26
INSTALLATION DISTANCE (FT)	49-82	82-115	82-115

AE3

All-in-Two

Optimized Solar Positioning & DarkSky Approved

The AE3 Split Model separates the solar and battery engine from the LED luminaire, allowing installers to angle the solar module for maximum charging while mounting the LED head in an optimal position.

Applications

Recommended for sites requiring precise light placement, e.g. streetscapes, parking-lots, campuses, and pathways.

Platform Advantages

- Municipality-grade corrosion-resistant materials
- IP66 waterproof + IK08 impact resistance
- High-efficiency monocrystalline solar modules
- Intelligent battery protection and long cycle life
- PIR-based adaptive lighting
- Supports 12–26 ft pole heights
- Designed for 10–40W LED performance
- Durable performance in high-heat and storm-prone climates



(90W / 615Wh / 30W LED)





10+ year Battery

Long-life LiFePO₄ batteries



Independent Solar engine



Independent LED

IES T2-S, T2-L, T3 distributions



Solar Panel	AE3 C6020N	AE3 C9030Q	AE3 C9040R
POWER OF PV MODULE (W)	60	90	90
LITHIUM BATTERY CAPACITY (WH)	308	512	615
NET WEIGHT OF PRODUCT (LBS)	32	43	44.5
DIMENSION OF PRODUCT (IN)	42.5(L) ×17.3(W) ×4(H)	56(L) ×17.3(W) ×4(H)	56(L) ×17.3(W) ×4(H)
Light Parameters			
LIGHT OUTPUT (W)	20	30	40
COLOR TEMPERATURE (K)	3000/4000/5000 (ALL MODELS)		
TYPICAL LUMINOUS FLUX (LM)	3800	5700	7600
Mounting Recommendation			
TOP OF POLE OR TENON OD (IN)	2.75-3 (ALL MODELS)		
INSTALLATION HEIGHT (FT)	13-23	20-26	20-26
INSTALLATION DISTANCE (FT)	49-82	82-115	82-115

Luminaire	RS12	RS20	RS30	RS40
PIR SENSOR	√	√	√	√
DIMENSION OF PRODUCT (IN)	25.6(L) × 7.1(W) × 3.8(H) (ALL MODELS)			
NET WEIGHT OF PRODUCT (LBS)	32	43	44.5	44.5
Light Parameters				
LIGHT OUTPUT (W)	12	20	30	40
COLOR TEMPERATURE (K)	3000/4000/5000 (ALL MODELS)			
TYPICAL LUMINOUS FLUX (LM)	2280	3800	5700	7600
Mounting Recommendation				
TOP OF POLE OR TENON OD (IN)	2.36 (ALL MODELS)			
INSTALLATION HEIGHT (FT)	9.8-16.4	13.1-23	16.4-26.2	16.4-26.2
INSTALLATION DISTANCE (FT)	39'-66'	49'-82'	82'-115'	82'-115'

AE6

All-in-One

Maximum Power in a Single Integrated Unit

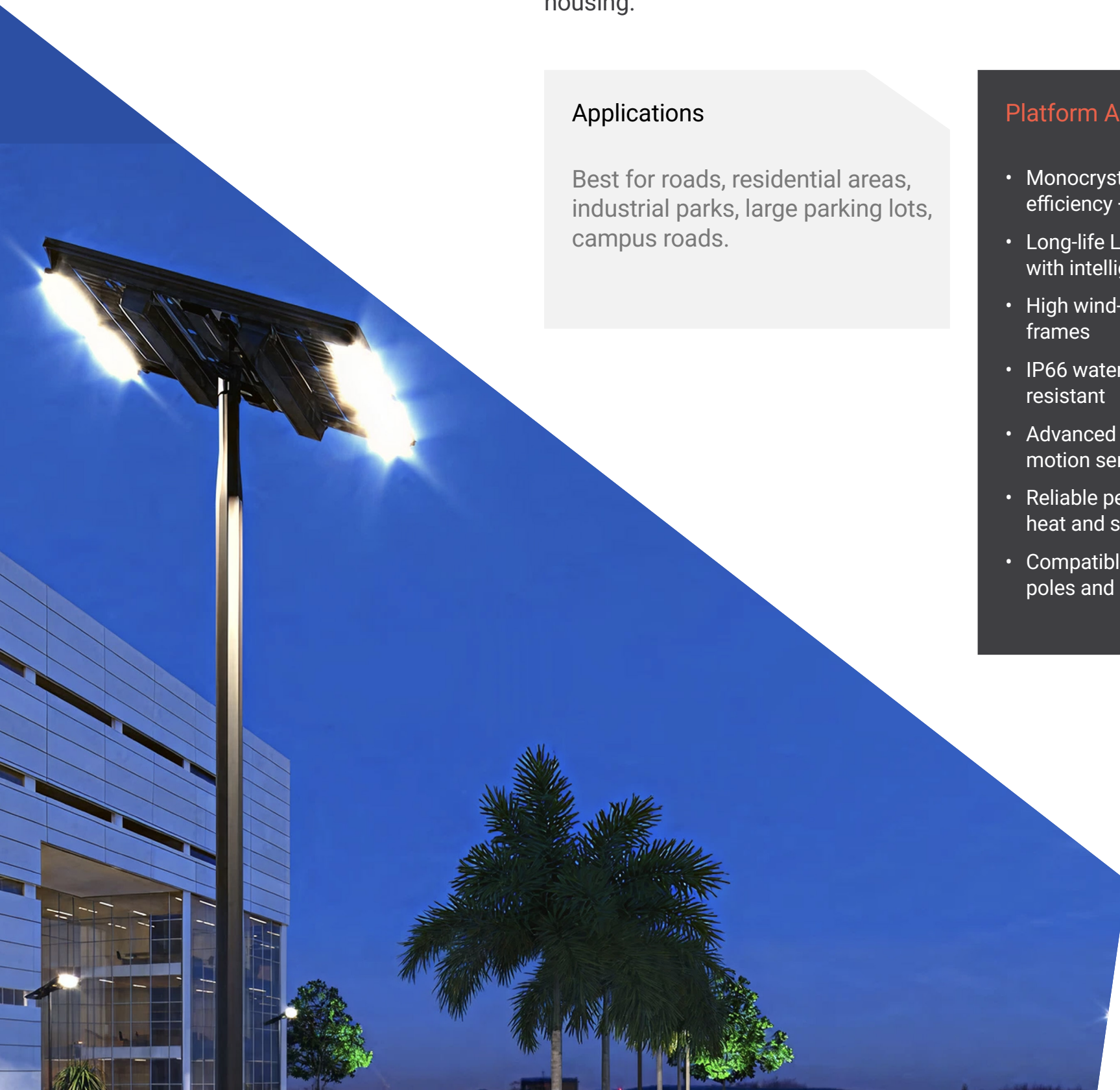
The AE6 AIO integrates large-format monocrystalline solar modules, high-capacity batteries (820–1229Wh), advanced optics, and a 40–80W LED engine into one streamlined, all-in-one housing.

Applications

Best for roads, residential areas, industrial parks, large parking lots, campus roads.

Platform Advantages

- Monocrystalline panels: high efficiency + bi-facial options
- Long-life LiFePO₄ battery system with intelligent protection
- High wind-load stability & reinforced frames
- IP66 waterproof & IK08 impact resistant
- Advanced PIR or optional DISS motion sensing
- Reliable performance in extreme heat and storm-prone environments
- Compatible with standard round poles and outreach arms





Powerful 40–80W LED

light for roads and large area lighting



High-output Solar

150–200W Solar engine



Extended Battery

820–1229Wh LiFePO₄ battery



Model Number	AE5 S150V12B64L40	AE5 S200V12B96L60
POWER OF PV MODULE (W)	150	200
LITHIUM BATTERY CAPACITY (WH)	820	1229
QTY. OF LED CHIPS (PCS)	1 x 28 (BOTH MODELS)	
PIR SENSOR	PIR OR DISS (BOTH MODELS)	
NET WEIGHT OF PRODUCT (LBS)	61.7	39
DIMENSION OF PRODUCT (IN)	44.2(L) × 22.8(W) × 5.9(H)	62.3(L) × 28.8(W) × 5.9(H)
WIRELESS CONTROL (OPTIONAL)	AVAILABLE ON BOTH MODELS	
Light Parameters		
LIGHT OUTPUT (W)	40	60
OPTIONAL DISTRIBUTION	T2M/T5 (BOTH MODELS)	
COLOR TEMPERATURE (K)	3000/4000/5000 (BOTH MODELS)	
TYPICAL LUMINOUS FLUX (LM)	7600	11400
WORKING MODE	PROGRAMMABLE (DEFAULT 30%–100%) BOTH MODELS	
BATTERY BACKUP TIME (DAYS)	3 DAYS (ALL MODELS)	
Mounting Recommendation		
EPA (EFFECTIVE PROJECTED AREA) (FT² @ 25°)	4.49	6.33
APA (ACTUAL PROJECTED AREA) (FT² @ 25°)	3.74	5.28
WIND LOAD RATE (MPH)	130 (BOTH MODELS)	
MAXIMUM BRACKET INNER DIAMETER (IN)	3.54 (BOTH MODELS)	
TOP OF POLE OR TENON OD (IN)	3.15-3.50 (BOTH MODELS)	

AE6

All-in-Two

Optimized Solar Positioning & DarkSky Approved High-Performance Lighting

The AE6 Split Model separates the solar engine from the LED luminaire, allowing each to be **positioned independently** for maximum charging efficiency and precise photometric placement.

This is the ideal choice for locations with variable shading, off-axis solar orientation, or situations where the LED head must be installed on an outreach arm.

Applications

Best for roads, main streets, pathways, industrial sites, broader-area lighting with complex solar conditions.

Platform Advantages

- Monocrystalline panels: high efficiency + bi-facial options
- Long-life LiFePO₄ battery system with intelligent protection
- High wind-load stability & reinforced frames
- IP66 waterproof & IK08 impact resistant
- Advanced PIR or optional DISS motion sensing
- Reliable performance in extreme heat and storm-prone environments
- Compatible with standard round poles and outreach arms





Modular Solar

150–300W solar module options



Long-life battery

820–1229Wh LiFePO₄ battery



Independent LED

IES T2-S, T2-L, T3 distributions



Solar Panel	AE6 S150V12B64	AE6 S200V12B96	AE6 S300V12B96
POWER OF PV MODULE (W)	150	200	300
LITHIUM BATTERY CAPACITY (WH)	820	1229	1229
NET WEIGHT OF PRODUCT (LBS)	57.3	81.5	94.8
DIMENSION OF PRODUCT (IN)	44.2(L) ×28.8(W) ×5.9(H)	62.3(L) ×28.8(W) ×5.9(H)	59.5(L) ×42.6(W) ×5.9(H)
WIRELESS CONTROL (OPTIONAL)	AVAILABLE (ALL MODELS)		
Light Parameters			
WORKING MODE	PROGRAMMABLE (DEFAULT 30%-100%)		
LIGHT PHOTOSENSITIVITY (LX)	60-90 (ALL MODELS)		
Mounting Recommendation			
EFFECTIVE PROJECTED AREA (FT² @ 25°)	4.49	6.33	8.86
ACTUAL PROJECTED AREA (FT² @ 25°)	3.74	5.28	7.38
WIND LOAD RATE (MPH)	130 (ALL MODELS)		
MAXIMUM BRACKET INNER DIAMETER (IN)	3.54 (ALL MODELS)		
TOP OF POLE OR TENON OD (IN)	3.15-3.50 (ALL MODELS)		

Luminaire	RS30	RS40	RS50	RS60	RS80
LIGHT OUTPUT (W)	30	40	50	60	80
TYPICAL LUMINOUS FLUX (LM)	5700	7600	9500	11400	15200
COLOR TEMPERATURE (K)	3000/4000/5000 (ALL MODELS)				
MOTION SENSOR	PIR/DISS (ALL MODELS)				
NET WEIGHT (LBS)	7.1	7.1	7.1	8.8	8.8
DIMENSION OF PRODUCT (IN)	25.6(L)x7.1(W)x3.5(H)		31.5(L)x7.1(W) x3.5(H)		
Mounting Recommendation					
TOP OF POLE OR TENON OD (IN)	2.36 (ALL MODELS)				
INSTALLATION HEIGHT (FT)	16-26	16-26	26-39	26-39	26-39

Mono360 Prime

Sleek. Simple. Plug-and-play solar performance.

Mono360™ Prime is the sleek, single-stack foundation of the Mono360 vertical solar lighting platform. Designed for fast deployment and clean integration, Prime pairs seamlessly with the Freedom PLUS LED luminaire—creating a fully integrated off-grid lighting solution with minimal visual footprint.

The vertical 360° solar engine captures sunlight from every direction and connects directly into the Freedom PLUS luminaire, which houses the battery, MPPT controller, and programmable lighting intelligence. Together, the system delivers reliable, year-round performance with precise control over lighting output—optimized for parks, pathways, campuses, and smaller municipal projects.

Platform Advantages

- Integrated Architecture: Mono360 Prime pairs seamlessly with the Freedom PLUS luminaire
- Plug-and-Play Deployment: The vertical solar module mounts directly to any of our modular poles
- Smart Lighting Behavior: Freedom PLUS provides PIR-activated dimming
- Minimal Visual Footprint: A slim, modern solar column with a matching luminaire—the aesthetic is unified, simple, and architectural.

Applications

Perfect for parks, bike lanes, pedestrian routes, HOA streets, campuses, and smaller municipal projects.





Integrated LED and battery

Seamless pairing with
Freedom Plus Luminaire



Easy install

Plug-and-play Solar Engine



360° Solar Engine

Optimized for low-light environments



Solar Panel	VSPV 150W22-280	VSPV 240W18-280
POWER OF PV MODULE (W)	156	240
NET WEIGHT OF PRODUCT (LBS)	36.4	48.5
DIMENSION OF PRODUCT (IN)	51.8(L)x11.0(W) x9.4(H)	74.7(L)x11.0(W) x9.4(H)
WIRELESS CONTROL (OPTIONAL)	NO	NO
Light Parameters		
WORKING MODE		
LIGHT PHOTOSENSITIVITY (LX)	PROGRAMMABLE (DEFAULT 30%-100%)	
Mounting Recommendation		
EFFECTIVE PROJECTED AREA (FT² @ 25°)	4.76	6.86
ACTUAL PROJECTED AREA (FT² @ 25°)	3.97	5.72
WIND LOAD RATE (MPH)	160 (BOTH MODELS)	
INSTALL DIMENSION (IN)	2.36-6.73 (BOTH MODELS)	

Luminaire Freedom PLUS	RS30
LITHIUM BATTERY CAPACITY (WH)	410
LIGHT OUTPUT (W)	30
TYPICAL LUMINOUS FLUX (LM)	7200
COLOR TEMPERATURE (K)	3000/4000/5000
MOTION SENSOR	PIR/DISS
NET WEIGHT (LBS)	8.82
DIMENSION OF PRODUCT (IN)	32.7(L) x9.5(W)x8.3(H)
Mounting Recommendation	
TOP OF POLE OR TENON OD (IN)	2.36
INSTALLATION HEIGHT (FT)	16-26
INSTALLATION HEIGHT (FT)	9.8-23.0

Mono360 Ultra Series

Scalable power. Modular intelligence. Built for real-world

The Mono360™ Ultra Series represents the high-capacity, modular evolution of the Mono360 vertical solar lighting platform. Designed for municipal, commercial, and infrastructure applications, the Ultra Series integrates the solar engine,

energy storage, and intelligent control into a single streamlined system—delivering reliable off-grid performance with reduced installation complexity.

Featuring a 360° vertical solar architecture, the Ultra Series captures sunlight from every direction, enabling consistent energy collection across changing conditions, seasons, and sun angles. Its clean, cylindrical form minimizes visual impact while maximizing performance, making it ideal for modern streetscapes and demanding public environments.

Platform Advantages

- Battery capacities ranging from 820 Wh up to 2,048 Wh per pole
- Modular battery design for scalable energy storage
- Integrated BMS with thermal, over-charge, and over-discharge protection
- Designed for long service life and consistent performance in real-world environments
- This flexible architecture ensures the Ultra Series can be engineered for efficiency, resilience, or maximum autonomy—without changing the core platform.

Applications

Designed for parks and pathways through to municipal streets, arterial roads, freeway off-ramps, and DOT-led infrastructure projects requiring reliable off-grid lighting.





Integrated LED and battery

Seamless pairing with Freedom Plus Luminaire



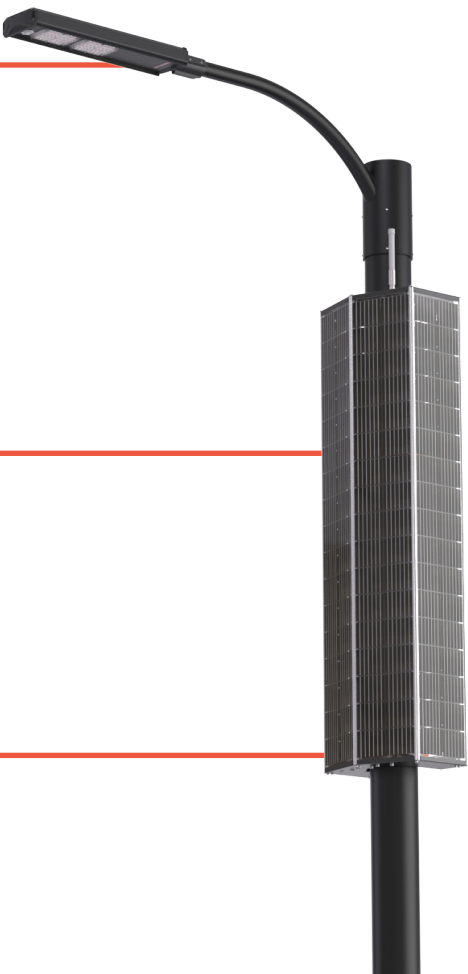
Energy Core to Solar Energy

MPPT-managed charging system



360° Solar Engine

Optimized for low-light environments



Solar Panel	ULTRA 500W20-472	ULTRA +
POWER OF PV MODULE (W)	500	1000
LITHIUM BATTERY CAPACITY (WH)	820	UP TO 2048
NET WEIGHT OF PRODUCT (LBS)	83.78	110-145
DIMENSION OF PRODUCT (IN)	74.13(L) x 18.58(W) x 12.72(H)	74.13(L) x 18.58 (W) x 25.44(H)
WIRELESS CONTROL (OPTIONAL)	YES	YES
Mounting Recommendation		
EFFECTIVE PROJECTED AREA (FT² @ 25°)	11.48 (BOTH MODELS)	
ACTUAL PROJECTED AREA (FT² @ 25°)	9.57 (BOTH MODELS)	
WIND LOAD RATE (MPH)	160 (BOTH MODELS)	
INSTALL DIMENSION (IN)	3.94-7.87 (BOTH MODELS)	

Luminaire	RS30	RS40	RS50	RS60	RS80
LIGHT OUTPUT (W)	30	40	50	60	80
TYPICAL LUMINOUS FLUX (LM)	5550	7600	9500	11400	15200
COLOR TEMPERATURE (K)	3000/4000/5000 (ALL MODELS)				
MOTION SENSOR	PIR/DISS (ALL MODELS)				
NET WEIGHT (LBS)	7.1	7.1	7.1	8.8	8.8
DIMENSION OF PRODUCT (IN)	25.6(L) x7.1(W) x3.8(H)	25.6(L) x7.1(W) x3.8(H)	31.5(L) x7.1(W) x3.8(H)	31.5(L) x7.1(W) x3.8(H)	31.5(L) x7.1(W) x3.8(H)
Mounting Recommendation					
TOP OF POLE OR TENON OD (IN)	2.36 (ALL MODELS)				
INSTALLATION HEIGHT (FT)	16-26 (ALL MODELS)				

SolBol™

High-Performance Solar Lighting for Pathways & Pedestrians

SolBol™ represents the next generation of pathway lighting: a fully self-powered, municipality-grade solar bollard engineered to deliver reliable illumination in real-world conditions where conventional bollards cannot.

Its unique triple-surface solar intake system—a 30 Wp wraparound vertical module, 4 Wp top module, and 3 Wp recessed “mouth” module—ensures maximum charging throughout the day from every angle, even in partially shaded environments.

Designed with a sculptural monolithic form, SolBol™ blends into premium landscapes while delivering powerful, energy-efficient asymmetric pathway lighting (IES Type II) at 3000 K.

Lighting That Thinks for Itself

SolBol™ automatically adapts throughout the night:

- First 5 hours: 100% brightness
- Remainder of night: 30% standby, rising to 100% for 30 sec when motion is detected
- Optional PIR or microwave sensing

Applications

Best for sidewalks, pedestrian pathways, public spaces, and paths





Adaptive Lighting

All-night operation with sensor



High Power Solar

Triple-surface wrap around
IP67 + IK10 protection



High Power Battery

3000-cycle LiFePO₄ battery



Light Performance	
LIGHT OUTPUT	≈ 200+ LUMENS (135 LM/W × 1.5 W)
POWER RANGE	1.5–5 W (PROGRAMMABLE)
CCT OPTIONS	3000 K / 4000 K / 5000 K
OPTICS	IES TYPE II (ASYMMETRIC PATHWAY)
DIMMING	4-STAGE ADAPTIVE
MOTION ACTIVATION	PIR OR MICROWAVE
NIGHT PROFILE	5 HRS @ 100% > 30% STANDBY > 100% ON MOTION
Solar System	
TOTAL SOLAR INPUT	37 WP MULTI-SURFACE PV
PV SURFACES	TOP + RECESSED + WRAPAROUND VERTICAL
PV RATING	IP66

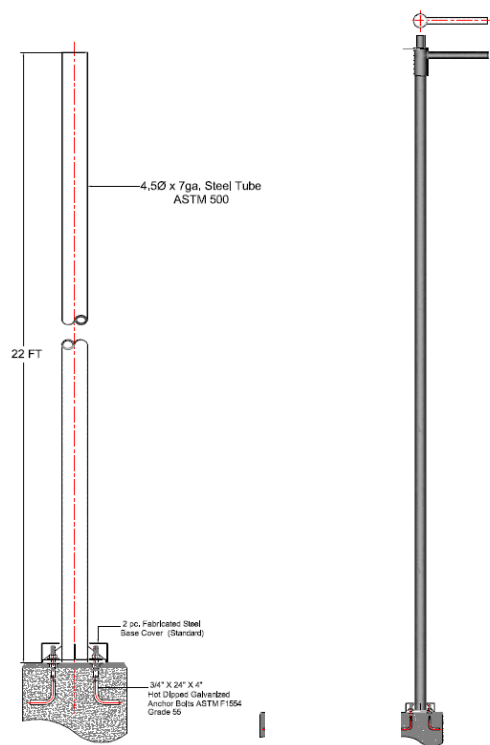
Battery & Power	
BATTERY TYPE	LIFEPO ₄
BATTERY CAPACITY	153 WH
CYCLE LIFE	3000 CYCLES (TYPICAL)
PROTECTION RATING	IP67 / IK10
Mechanical	
HEIGHT (FT)	3.6 MINIMUM (CUSTOM OPTIONS)
DIAMETER (IN.)	7.1
TOTAL WEIGHT (LBS)	46.7
CONSTRUCTION	STAINLESS-STEEL BODY + ALUMINIUM HEAD
FINISH	CUSTOM COLORS

Poles

Engineered for Universal Compatibility, Effortless Installation & Future-Ready Solar Innovation

The Leadsun Modular Pole System has been designed from the ground up to support every configuration within the Leadsun ecosystem – from compact AE1 systems to high-performance AE3 and AE6 solar engines, through to the next-generation Mono360 wraparound solar modules.

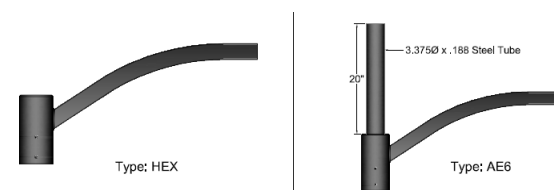
22ft Modular Pole Assembly



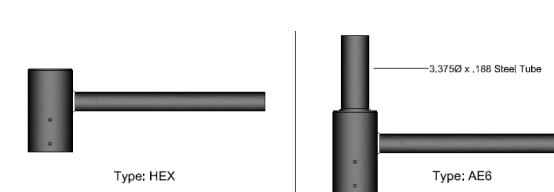
Built from premium structural steel and fabricated to ASTM-grade standards, the modular pole range provides maximum flexibility, universal mounting options, and architect-grade stability for public lighting, urban streetscapes, pathways, and parks.

Pole Outreach Attachments

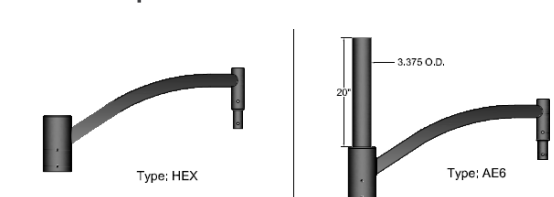
Cobra-Head Fixture Outreach Arm



Freedom Series Fixture Outreach Arm



Bell Shaped Fixture Outreach Arm



System Advantages

- **One Pole = Any Leadsun Product**
Simplifies procurement, reduces SKUs, and supports future upgrades.
- **Rapid Deployment** Universal spigots & modular outreach arms support fast on-site configuration.
- **Lower Installation Cost** EZYtilt eliminates expensive machinery, licence requirements, and height risks.
- **Future-Proof Solar Infrastructure**
Easily swap AE-series solar engines for Mono360 modules as technology evolves.
- **Safer Maintenance** Ground-level serviceability dramatically reduces OPEX for cities and contractors.

EZYFoot™

Rapid, No-Concrete Foundation for Solar Poles & Smart Infrastructure

Leadsun's EZYFoot™ Concrete-Less Footing System (SureFoot S400 series) is a next-generation pole foundation designed for fast installation, minimal site disruption, and long-term structural resilience. Unlike traditional concrete piers that require excavation, curing time, and heavy machinery, EZYFoot™ provides a fully engineered steel ground-anchor footing that can be installed in minutes and put into service immediately. Unlike traditional concrete piers that require excavation, curing time, and heavy machinery, EZYFoot™ provides a fully engineered steel ground-anchor footing that can be installed in minutes and put into service immediately.

Applications

Ideal for remote sites, parks, environmentally sensitive areas, and tight timeline projects.



High Structural Strength

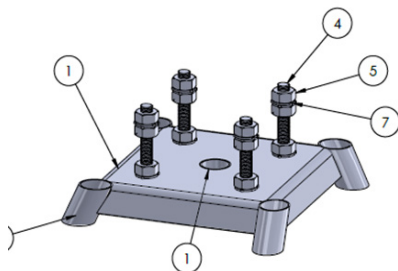
The SureFoot S400 system ensures exceptional wind loading performance suitable for AE6, VertHex, and tall roadway or area lighting poles.

- 12 mm minimum plate thickness (G350)
- Multiple ground anchors for radial compression and lateral stability
- Engineered hinge points for EZYtilt™ compatibility
- M20 Grade 8.8/8.5 anchor bolts



Installed in Minutes Not Days

Contractors can install the footing using handheld tools, anchor each leg, level the top plate, and mount the pole immediately.



Sustainable

Perfect for parks, nature reserves, coastal zones, and temporary installations. Because it eliminates concrete:

- No soil contamination
- No mess, no spills, no heavy machinery
- Fully removable and recyclable



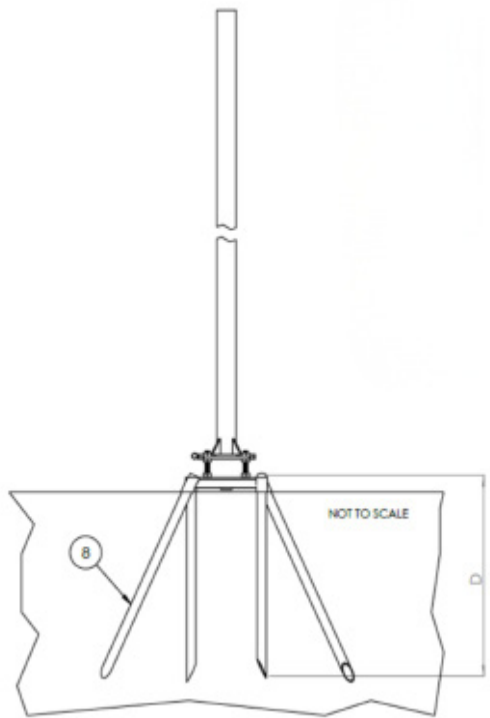
Integrated With the EZYtilt™ Lowerable Pole System

The EZYFoot™ S400 includes hinge-integrated plates designed for safe, ground-level pole raising/lowering using the EZYtilt system.



Zero Concrete Required

The S400 foundation eliminates the need for digging, formwork, trucks, and curing. It uses a series of galvanized ground anchors that lock the footing plate into the soil, forming a high-strength, load-bearing structure.



LEADSUN

Limitless Light | Beyond the Grid



